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ON

SPERMATORRHŒA:

ITS RESULTS AND COMPLICATIONS.

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ON

SPERMATORRHŒA:

ITS RESULTS AND COMPLICATIONS.

BY

J. L. MILTON,

SURGEON TO ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.

Enlarged and Reprinted from the original Papers published in the LANCET *for* 1852, *and the* MEDICAL CIRCULAR *for* 1858.

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PREFACE.

THE very favourable reception of eight large editions of this Work has induced me to issue a ninth, which I am sanguine enough to hope may be as fortunate as its predecessors.

In order to limit the size of the Work, histories of cases have been for the most part omitted in this edition.

Although so many references have been made, it is to be understood that the practical part of the Work, especially that relating to treatment, is almost entirely the record of experience. I have tried most of the remedies that have been recommended on good grounds, and the result of the observations made on their action is contained in the following pages.

As I have been treated to rather more than a fair share of vituperation in one journal for drawing the disease in too favourable a light, and in another for the very opposite fault, an impartial reader may be disposed to assume that the object aimed at, that of describing Spermatorrhœa as it exists, and not as it ought to be, has been attained.

An objection has been made to the nature of this Work by men whose good opinion I am proud of enjoying, and with whom on most other points I am only too happy to concur. It is that I have elevated a mere symptom—a

subordinate and not very important form of nervous disorder —to the rank of a disease. With all deference I submit that the arguments in favour of Spermatorrhœa being a disease are unanswerable. Even were it merely a symptom I should consider that it merits all the attention my readers can give it. One of the best practitioners of modern days, Sir Benjamin Brodie, tells us that the discrepancies between the systems of pathologists and the experience of surgeons would be avoided "if writers would sometimes condescend to treat of symptoms rather than diseases;" and he is only one of many who, in the evening of life, warned by the errors and misery they have seen result from a blind adherence to systems and fashions, have arrived at the conviction that symptoms, which are eternal in their nature and as indestructible as the qualities of matter, belong to those little things which, after all, chiefly make up the great business of life, and which are of far more moment than any theory or system—things of sand, heaped up by one flood only to be scattered by another.

St. John's Hospital, Leicester Square, W.C.,
June 3rd, 1872.

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SPERMATORRHŒA:

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"Spermatorrhœa is a disease, and ought to be studied, understood, and treated as such."—Clinical Lecture by John Adams, Esq. *Medical Times*, 1857, vol. i. p. 453.

"Die Pathologie der Functionen der Genital-Organe ist, gegenüber den Störungen anderer Functionsgebiete, immer noch ein steriles Feld."—"Studien und Erfahrungen über Samenverluste, von Dr. Dicenta," *Deutsche Klinik*, 1857, S. 13.

CHAPTER I.

BRIEF HISTORY OF THE DISEASE.

By this I mean the collecting and gathering together into one focus a few fragmentary and scattered observations relating to the subject; for history it has none. That of gonorrhœa and syphilis is obscure enough; but compared with the darkness which rests on spermatorrhœa before the days of Hunter, it is light itself. Most likely the complaint began to affect men so soon as they first commenced abandoning the life of the hunter and rude shepherd for that of citizens,—when they began, for the sake of safety and greater ease of living, to sleep in the low-browed, pent-up rooms of the close-built, little fortified cities and towns of the olden times; for such is its nature. It seems beyond all doubt that Moses legislated for those affected with it, and that it was described and treated, either

by Hippocrates himself, or by some one who lived near his day; for be the work "about diseases" (περι νουσων) genuine or spurious as regards its authorship by the father of medicine, it was clearly written by an experienced physician, and not long after the time of Hippocrates. The author not only describes[1] spermatorrhœa, but discharges from the seminal vesicles; and advises for the treatment of the former, abstinence from immoderate drinking, venery, and excessive exercise, except walking, for a year. The patient was also to avoid exposure to cold and the sun, and to take the tepid bath,—advice, which I am afraid was, except in respect to the abstinence, hardly likely to be very beneficial.

Celsus again treats of spermatorrhœa,[2] but only in a very advanced and pretty well hopeless state; if, indeed, in what he says he described a discharge of semen, and not, as was more probably the case, either cystorrhœa or gleet of the seminal vesicles, in some cases at any rate. He recommends for it very strong frictions and affusions; cold swimming-baths, he also says, are useful, and both food and drink are to be taken cold. Moreover, the patient is to avoid all crudities, all flatulent food, and everything that promotes the secretion of semen. As some of my readers may wish to know what the grand old writer included under this last head, I give the list. It comprises winter wheat, simila, most probably corresponding to the flour used by our bakers for making white bread, eggs, alica, supposed to have been the kind of coarse wheat called spelt in some places,—now, I believe, disused in England, but still grown in France,—starch, all kinds of glutinous flesh, pepper, rocket, bulbs, and pine-nuts. He also suggests fomenting the lower parts with a decoction of astringent vervains, and covering the lower portion of the abdomen with cataplasms of the same herbs, and particularly of rue, steeped in vinegar, and cautions the patient to avoid sleeping in a supine position.

It would scarcely be just to reproach Celsus, as we might very justly reproach a physician of the present day, for basing treatment on principles which he never had, and never could have, proved practically. Contrary to what happens in all other arts, men seem to have always begun in medicine by taking measures, rather from a conviction or fancy as to what would result from doing so than

[1] *Magn. Hippæ. Op. omnia*, edit. Car. C. G. Kühn, tom. ii. p. 265, φθισις νωτιας, &c.

[2] *De Medicinâ*, lib. iv. c. 21.

from observation of what had been seen to follow this,—a practice by no means discontinued at the present day. It will, however, be pretty obvious to those acquainted with the therapeutics of spermatorrhœa, that with the exception of the cold affusion, the application of vinegar and rue to the genital organs, and the avoidance of a supine position, there is little in the prescriptions of Celsus that was likely to have been of service to his patients. Cold food, so far from being beneficial, would, if it exerted any influence at all, act injuriously; as a patient in a state of tabes—for it is this state which he is professing to treat—would require all the support he could get; and one very certain means of nullifying this object would be to make his food unpalatable. As to the properties attributed by Celsus to the proscribed articles of diet, we may dismiss the whole subject at once, by observing that up to the present time nothing has been made out on this head.

Unless I have mistaken a passage in Plutarch, in his account of Hercules, the great Alcides himself underwent purification on account of having suffered from this disorder. Whether Hercules ever existed or not matters little here; the fact that the historian could mention such an incident (always supposing my reading of the passage is correct, and that is quite open to doubt), speaks for the fact of the affection being known in his day beyond the bounds of the medical circle. In all probability Plutarch would not have stated anything about even such remote times as those of Hercules, that would not stand the test of practical examination; he could hardly have invented for such a hero a disorder which has never been considered to shed any particular lustre on those suffering from it. The writers of that day were in most respects essentially practical; they might not always be so learned as the bookworms of a later generation: they had less to tempt them into such a path; but they knew a great deal of the real living world,—of what men said,—of what was likely to be believed or disbelieved. Much of what they taught and wrote was gathered from other men as practical and well versed in life as themselves. Subjects even of this nature were, we may assume, from the freedom with which Horace, to whom the doors of the best society in Rome stood open, handles it,[3] to say nothing of Ovid, Martial, Juvenal, and others, discussed in public; and what holds good respecting the world of

[3] *Satirarum*, lib. i. 5, l. 84.

Horace, would scarcely be very inapplicable to the scenes in which Plutarch moved. Lastly, when the historian or biographer puts forward his account of any subject or occurrence, it was generally in a form which enabled the author quickly and effectually to correct any errors too glaring for common belief. I think, therefore, it is a fair conclusion to assume that the disorder was pretty generally known in Plutarch's day.

We may now pass over centuries, during which, so far as my reading has enabled me to ascertain, the subject was rarely if ever touched upon, except in a very brief and fragmentary manner. Although the medical writers of the middle ages studied gonorrhœa and syphilis with such care and diligence as to have bequeathed to their successors a large amount of valuable information; although the views of those of the sixteenth century were far more correct than those of their successors as respects the pathology of syphilis and the separation of this disease from gonorrhœa; yet, save now and then a brief passing notice, they took little, if any, heed of our present subject, at which, however, those who remember that the existence of the disease has been questioned in the nineteenth century will not wonder so much. Still, I think enough evidence remains to show that it was occasionally recognized during this long interval, and therefore continued to exist. Those who wish to link together the scattered scraps and patches of medical lore on this point, who might like to know what Sperchius or Aurelian, Tulpius or Ambroise Paré might have to say on the matter, will find at the end of this volume a list of all the references I have been able to meet with. It would lead me too far out of my way to go into them at length.

Although the practice of medicine had greatly improved during the last hundred years before Hunter's day, thanks to such men as Sydenham, Radcliffe, Mead, &c.; though surgery had advanced; though the treatment of syphilis and gonorrhœa, while still rude and dangerous enough, had been rendered in some of its essentials almost as successful as in the present century, a fact about which I think little doubt can remain in the minds of those familiar with the medical literature of the age; the cloud still hung over spermatorrhœa, its unfavourable fortune continued to pursue it, and the pathology and treatment of it remained in much the same position as ever.

It is to the illustrious John Hunter that we are indebted for the

first suggestions of a rational mode of treating this disorder. His method, it is true, was based on very simple means, being principally limited to the use of laudanum and cold bathing.[4] But the free use of sedatives in spermatorrhœa is one of the most valuable improvements ever yet made in the treatment of it. Moreover, though that wretched villain, Sir Everard Home, was, perhaps, the first[5] to bring forward another great improvement, that of using nitrate of silver in those cases, yet I am very strongly disposed to believe he stole the idea from Hunter, and that but for the inspiration of his renowned master, he could never have thought of caustic in this disorder or stricture. This may seem a harsh charge against the memory of a great surgeon, of one who long stood so prominently forward almost as the representative of Hunter and the continuer of his labours; but there is so little in the way of discovery in his writings that it is difficult to divest one's mind of such impressions; and if his fame suffers now unjustly for what he might never have done, the reader must bear in mind, that Home's audacious piracy of Hunter's discoveries, and the destruction of his manuscripts, were acts so abominable as to expose him to suspicions of the worst nature.

But it is not until we come to the time of Lallemand, Curling, and Phillips that we find spermatorrhœa elevated to its true position of a special, independent disorder; and it is perhaps to the first of these, more than to any writer of the present day, that surgery is indebted for such impetus as has been given of late years to the study of this disease. Enjoying, as he did, excellent opportunities for studying the complaint, he made such admirable use of them, that his work will remain a lasting memorial of his genius and industry. I am well aware that it is open to severe censure, that in many parts it is only too redolent of exaggeration and bad taste, and that his treatment requires great modification. But for all this, it is quite certain that to M. Lallemand belongs the merit of having forced upon the profession a recognition of the importance of the disorder, and of pointing out the necessity for pursuing the only method by which the obscurities surrounding its pathology and treatment can be cleared up—extended clinical and *post-mortem* observations.

[4] *A Treatise on the Venereal Disease*, by John Hunter, 1810, pp. 220—222.

[5] *On the Treatment of Strictures in the Urethra*, by Everard Home, Esq., F.R.S., 1803, vol. ii. p. 249.

M. Lallemand found in Mr. Phillips, of Westminster Hospital, an earnest propagator of his views as to treatment, the value of which he carefully endeavoured to expound, while he warned men at the same time against M. Lallemand's high colouring. It was reserved, however, for Mr. Curling to produce a view[6] of the pathology and treatment of this disorder, which, while free from the errors and over-strained views of M. Lallemand, was yet admirably calculated to lend the subject its due importance. Every person desirous of mastering this subject should make himself familiar with Mr. Curling's work. I cannot say that I think he has given as much attention to the therapeutical part as one could have wished; still his remarks are so evidently the result of careful and extensive observation, that few can read them even cursorily without learning something.

Present State of Professional Opinion on the Subject.—The present state of opinion about spermatorrhœa, both in the profession and among the public, is not satisfactory; it has never been so, and there does not seem much prospect of improvement. Indeed, ever since there was such a thing as opinion on this or any cognate subject, it appears, so far as we can learn from reading, to have vibrated in the profession between something very like intolerance and neglect on the one hand, and an amount of ignorance on the other, which gave only too much vantage-ground to quackery; while the public mind is always seen divided between sympathizing interest and persecution. After religion, few topics seem to have evoked these tendencies more effectually, a statement, in proof of which I will beg to adduce some hasty scraps of evidence—all I have space for. Those anxious to find more will have little difficulty in doing so.

In the fourteenth and fifteenth centuries, when phagedænic diseases of the genitals were pretty common, the physicians, according to Savonarola, scarcely troubled themselves about these affections because they were seated on the genitals, and the cases came principally under the care of the surgeons, who were only allowed to use local means. As a coincidence, for I suppose I must not say consequence, the penis was entirely destroyed in a great many of these unfortunate persons, and numbers lost their lives.[7]

[6] In his *Practical Treatise on Diseases of the Testis*, 1856, chap. xvii.

[7] *Ricord's Lehre von der Syphilis*, von Dr. F. A. Simon, 1851, pp. 7 and 11.

Again in the good old times of the sixteenth century, when it was quite *en règle* to burn or hang any number of persons who contested the amount of divinity residing in a square inch of bread after it had been set upon the communion table, some inventive genius conceived the happy idea of getting rid of the venereal disease altogether, by turning out those afflicted with it to die of cold and hunger, much on the same principle as lepers and idiots were caged up, flogged, and tortured, with an eye to their improvement moral as well as physical. Of course we may assume that persons suffering from spermatorrhœa were to have gone the same road, as this disorder was inextricably mixed up with gonorrhœa and syphilis. The plan did not succeed, which, however, in no way detracts from its great merits, neither did it excite any serious opposition or unfavourable comment; indeed, so far as I have been able to make out, the suggestion seems to have been considered quite as natural as would that of a massacre in what, I suppose, we must look upon as the still better days of the early Norman kings, or the heptarchy; for it is rather difficult to make out when the good old times began and when they ended. It was therefore from no want of goodwill on the part of some of those in authority that the investigation of these disorders was not adjourned *sine die*.

Let the reader turn to the dawn of that age on which, at a later date, the labours of Hunter were to shed undying lustre. The days of the stern, thorough-going governments of the Plantagenets and Tudors are gone, to return no more. The spirit of Locke, and Newton, and Bentley is abroad. Men feel the influence of Harvey, Sydenham, and Radcliffe, and the genius of medicine is slowly but resistlessly clearing itself a path through the dense ignorance and prejudice that surrounded it. But when we come to wander through the literature of these disorders; when we are forced, in spite of ourselves, to notice the struggle of the more selfish and lower passions in resisting this progress, we see even a darker phase of human nature than in the former epochs. Everywhere popular prejudice, whether it be among the professed and acknowledged leaders of society or the dregs of the people, is, with a few honourable exceptions, leagued with quackery against the legitimate practitioner, and both find only too many supporters in the profession itself. The intolerant, it is true, could now no longer avail themselves of faggot and stake; but they could vilify, and that they did in good earnest. One very natural result of this and

of the imperfect legislation of the time was, that quackery throve apace, and in no domain so much as that of venereal disorders. The most arrant empiric was much on a par with his diplomaed rival. A regiment of the first class was handed over to one charlatan; the pills of another were sold at a guinea a dozen; nobility and even royalty[8] availed themselves of the vaunted skill of a third; and the public here, at any rate, openly sympathized with any man who professed to wage war against chartered monopoly. The charlatan, as ever, stuck at nothing that served his purpose; the surgeon and physician refused, from motives of honour, to profit by scandalous fraud and were laughed at for their pains.

What, at a later date, was Hunter's reward for the devotion with which he laboured at the study of venereal disease, a devotion so thorough and unselfish that few records in biography can parallel it? Why that he was written at and written down, carped at and controverted on every side, till, if what his opponents say be correct, not a line of what he wrote can stand; that we continue to be assured on indisputable authority that he was vastly over-rated; that, at best, he was but a mere worker; that he had no fixed principles of either pathology or treatment (which was possible enough, as he was searching after truth and not for any arguments to prop up fixed principles); and that his noble work is "conceived in an unphilosophical spirit, displays the worst faults both of his reasoning and style, and is more the production of a disciple of Aristotle than of a follower of Bacon," &c.[9] As if Hunter required to follow either!

And now to the practical question. Is the treatment of spermatorrhœa, that is to say, generally speaking throughout the profession, in much better plight than it was in the days of Hunter, or even in those which preceded his era? Is there any greater disposition on the part of the profession to cultivate the study of this disorder? Judging from what I can make out, I should be disposed to answer these questions in the negative, and to conclude that the amount of mischief arising from matters continuing in this state is much greater than is generally thought.

With regard to medical men who may happen to be suffering from these disorders, they know, or at any rate can easily learn for themselves, who is the fittest person to consult about their own maladies;

[8] The infamous quack, St. André, the associate of the notorious Mary Toft, was, in 1726, chirurgeon to the king's household.

[9] *Diseases of the Genito-Urinary Organs*, by Henry James Johnson.

but the position of a layman is very different, and, indeed in my opinion, so full of difficulties, that, till a radical change is effected, quackery will be as rampant as ever; for whether the patient's ills are real or imaginary, his mind is so full of them that he will seek for relief at any cost and anywhere.[10]

I will suppose that a patient finds or thinks he is suffering from spermatorrhœa, for practically it comes to the same thing, and that he is strong-minded enough, as happens perhaps with one patient in eight or ten, to write to one of the medical journals, asking what he ought to do. I need scarcely say he is pretty certain to receive an answer to the effect that he must avoid advertising quacks, read no works on the subject, and either consult his ordinary medical attendant or the nearest respectable practitioner. Now I have no wish to sit in judgment on the journals for acting in this way. It might very likely prove difficult enough for them to devise a better system, while to recommend any particular surgeon would lay them open to a charge of favouritism. Yet can there be a more solemn farce than giving a patient such an answer? Is there in Captain Bunsby's oracular responses anything more absurd than telling him to consult his ordinary medical attendant or any respectable practitioner? As if every person did not know that most persons so situated, especially young men, have not ordinarily a medical attendant; and that recommending "any qualified practitioner" means simply referring him to a body of gentlemen who, for the most part will, if they can, avoid having anything to do with the case. I say this quite advisedly. I believe there is no malady which men dislike to have under their care so much as spermatorrhœa.

In my opinion there is only one remedy for this state of matters, and that is, for the leaders of professional opinion *openly to recognize the disease.* Until the pathology and treatment of it form a more prominent feature than at present in the regular course of lectures on surgery and in surgical works; until it is no longer tacitly understood that spermatorrhœa is a topic to be mentioned only in a furtive way

[10] "I hardly know any state of mind more difficult to treat than that which is so often present in patients who believe themselves to be the subjects of spermatorrhœa. Although, perhaps, there may be no reason to believe that losses of this kind are actually going on, the patient's mind is too generally made wretched, and his happiness blasted, by the iniquitous pictures drawn of the presumed result of spermatorrhœa by the miserable harpies who have so generally taken possession of this department of practice."—*On Urinary Deposits*, by Golding Bird.

or rather to be shunned as much as possible; to be pooh-poohed as a trifle not worth taking into consideration, only suited to those who have nothing better to do, it will remain one of the happiest of hunting-grounds for the charlatan.

That the disease exists to a very great extent, far greater than is generally thought;[11] that it yearly reduces hundreds if not thousands to impotence and all its attendant ills, hypochondria, weariness of life, insanity, and so on; that not only every town, but every village, could show victims to this neglected malady, are facts which I feel assured will not be disputed by those who have looked into the subject. And the remedy for all this misery is to leave matters to take their course! Certainly human ingenuity could devise no more efficient system for cutting the patient off from all chance of relief, and encouraging those who are ready to plunder him and aggravate his sufferings. Not one patient in fifty would, if he could avoid it, go to a quack; that he is driven to such a step is in a certain degree due to the present state of professional opinion on the subject. As a body the public are powerless in the matter.

Let men try to burke the question as they may, its vitality will defy their efforts. They may fall back upon a policy of masterly inaction, but the evil will still bear its fruits. The sources from which the canker of quackery is fed, spring from two of the most powerful passions in the human breast, and though these may be diverted into healthier channels, they cannot be dried up. Mere censure is of no avail to put down the charlatan; the law is almost inoperative, and there is little prospect of improved legislation on this head. But were every quack to receive his deserts to-morrow in the shape of penal servitude, would the patient be any the better, and would the nefarious system thrive any the less? I doubt it. The patient would know as little where to apply for aid as he does now, and quackery, if overthrown in this form, would rise only more vigorous than before in another guise, and gather from its temporary suppression new materials for strength and mischief.[12] The hook might be more delicately baited but it would still be thrown to the

[11] "Le perdite seminali portano seco gravissime conseguenze; *la loro frequenza è assai maggiore di quella che per molti medici si creda.*"—"Sulle polluzioni involontarii, del dott. Aliprando Moriggia." *Giorn. della R. Acad. di Med. di Torino.* N. 4, 1861.

[12] "Per damna, per cædes, ab ipso
Ducit opes animumque ferro."

victim; the web might be better hidden from view, but it would just as infallibly entangle him. Quackery is more difficult to extirpate than the hydra; it can neither be killed by decapitation, nor strangled in the strongest grasp, and the only plan I can see is to starve it.

I believe one reason why medical men dislike so much to treat these cases is, that they see comparatively so few of them. Yet there is no reason whatever why every member of the profession should not be qualified to manage them, seeing that all that can be said about the therapeutics of the disorder can be compressed into a very moderate space. But it seems to me impossible that sound principles of pathology and treatment can be widely diffused unless they are openly taught, and while fundamental errors as to the functions of the organs pass unchecked, and indeed unheeded. A few years ago,[13] at a meeting of the Medico-Chirurgical Society, it was stated that eunuchs could beget children. I should have thought such an observation would have been challenged at once, but I was never able to learn that it elicited any comment. The observation has been more than once made[14] in medical papers, that an emission once a week or so can do no harm; and though this may hold good of a short period in early life, it becomes a very dangerous tenet when applied, as in the nature of things it will almost certainly be, to long-standing cases and a more mature age. Remedies which continually fail, such as the nitrate of silver, the ergot of rye, lupulin, &c., are spoken of by those who recommend them, if not as infallible, yet in a way which leaves little room for any other conclusion. The disease is said by some writers to be so easily curable, that its treatment can scarcely deserve a second thought, whereas it often taxes all the surgeon's resources; and its very nature is frequently so far misunderstood that we hear it spoken of as an affection of the seminal vesicles, which I hope to show have little if anything to do with it.

That the surgeons of a by-gone day should have taught such a doctrine as the last would be credible enough. When men like Mason

[13] March 22, 1859.

[14] See also "A clinical lecture on Retention of Urine from Enlargement of the Prostate Gland and Spermatorrhœa in connexion with Irritable Prostate, by John Adams, Esq.," *Medical Times*, 1857, vol. 1, p. 453; and an excellent letter by Mr. Heath, *Medical Times*, 1859, vol. 2, p. 545.

Good and Swediaur exhibit[15] so very indifferent an acquaintance with the subject, although they profess to treat of it, that, with the exception of their classical nosology, they can scarcely be considered very much in advance of the empirics contemporary with them, and that we look vainly in their pages for indications of being able even to keep pace with their predecessors, we can scarcely wonder that those who sought for information in their writings failed to find it; but in the present day, when we have such elaborate and expensive facilities given for the study of physiology, it is scarcely what we should have looked for, and it does not require much sagacity to predict, that till some better methods of observation are introduced, the treatment of spermatorrhœa will scarcely be in a satisfactory position.

[15] Should the reader consider that this statement requires qualifying, let him turn to Mason Good's description of his "entonic" and "atonic" spermatorrhœa (*The Study of Medicine*, 1829, vol. 5, p. 89), and say if it can be considered the production of a man who really understood the disorder.

CHAPTER II.

PATHOLOGY.

Classification of Spermatorrhœa.—Under the name spermatorrhœa I propose to group all discharges which result from morbid states of the testicles and excretory passages, producing greater expulsion of semen than is compatible with the maintenance of a healthy condition of the organs of generation.

Foremost among the disorders which may be referred to this group stand involuntary seminal emissions, which constitute a large proportion of the cases we are consulted about by spermatorrhœa patients. Next we have gleet of the seminal vesicles, in which, especially when accompanied by straining on account of constipation, we may find occasional expulsion of a few spermatozoa. Mr. de Meric, then president of the Harveian Society, in a discussion on a paper on spermatorrhœa by Mr. Gascoyen, clearly stated that he considered this disease to be spermatorrhœa, and that whatever might be said to the contrary the disease (spermatorrhœa) did exist and in this form; but inasmuch as seminal emissions are a real, serious, and sometimes obstinate disease, while this affection is slight, and never likely to affect either the health or the vital powers, I submit that the classification above is the better one. Lastly we find, not as integral parts of the disorder, but ranked by patients in the same category, certain affections of the prostate resulting in hyper-secretion of mucus, discharge of mucus from Cowper's glands, the urethra and bladder; disorders which, when they have resulted, or when the patient fancies they have resulted, from masturbation, often exert, through the mind, a most injurious influence over the virile powers.

Whatever objections may be made, I think the word spermatorrhœa ought to be extended so as to comprise involuntary seminal emissions.

They form not only by far the greatest number of the cases of this class, but they are of infinitely more importance than all the rest put together. The name has been objected to, and we have been told that the term ought to be restricted to cases in which the semen trickles away insensibly—a disease of the rarest nature, and to which the term spermatorrhœa is not a whit more applicable than it is to emissions, the verb ῥέω expressing quite as much the force of a stream as a trickling. Lastly, the arrangement I have suggested offers the advantages of collecting several allied and often contemporaneous disorders into one focus, with a prominent and easily recognized affection as a centre round which they may be arranged.

Divisions of Spermatorrhœa.—This disorder then may be divided into—1. Nocturnal emissions; 2. Diurnal emissions; and 3. the complaints just spoken of. It may perhaps save some trouble if I at once admit that this arrangement is crude and unscientific enough; but it is to be borne in mind that the object of the work is practical utility, and that I wish to say what I know of the subject in the simplest and most intelligible form. Dr. Albers, of Bonn, who has paid great attention to the subject, recognizes[1] three leading forms of spermatorrhœa. 1. Simply an abnormal discharge of seminal fluid. 2. The same associated with morbid changes in the seminal receptacles and ducts, and in the bulbus urethræ and prostate. 3. Cases presenting a combination of the two foregoing conditions. I cannot say that I quite understand the necessity for the last division; in all practical points it appears to be comprised in the second.

1. Nocturnal emissions constitute by far the greater part of the cases we are called upon to treat. When not severe or long continued, they seldom require more than cold bathing, out-of-door exercise, abstraction of the thoughts from the subject, and mild aperients combined with tonics. There are many cases in which it is difficult to say whether they call for any treatment or not, but as a broad rule it may be stated that they do so whenever the patient feels worse after them, and that in men who have reached the age of three or four and twenty, anything beyond one emission a month requires attention. I know this statement has been impugned, but I am quite prepared to abide by it. I did not put it forward till I considered I had quite sufficient evidence in my hands

[1] *Die Spermatorrhœa nach ihren körperlichen Verhältnissen, &c.*, von Dr. J. F. H. Albers. Bonn, 1862.

to justify me in doing so. I may be wrong in the conclusion I have ventured to draw, but I feel warranted in adhering to it.

2. Diurnal emissions, that is to say, emissions of semen, almost invariably occur as a result and complication of night discharges. They are not very common,[2] and are generally seen in nervous excitable persons, though this is by no means a constant rule. In some persons suffering from nocturnal emissions the organs become so irritable, that the act of caressing a dog or a horse, prolonged riding in a carriage, or contact of the perinæum and buttocks with any soft, bulky body, causes an imperfect erection followed by a seminal emission. I have seen several undoubted instances of this, and in one patient under my care the tendency to emissions had become so strong, apparently in consequence of some strong preparation of cantharides and capsicum having been given him when suffering from spermatorrhœa, that he could not travel even a short distance in a railway train, unless when standing, without having an emission. In the upright position he always escaped. He told me that on one occasion, while coming from Brighton to London by the morning express, he had had two emissions solely in consequence of having to remain seated. And it is to be remembered that these were unmistakeable ejaculations of semen.

But under the head of diurnal emissions are included emissions of mere mucus, which often trouble and alarm such patients more than the others. In some persons there is only a weeping of mucus; in others this is ejaculated, or at least propelled to the mouth of the urethra, in the form of a slight gush of fluid, often attended by a very disagreeable sensation, and followed, when severe and of long standing, by considerable prostration. Some patients have several of these in a day. I have examined many specimens of this discharge without finding any spermatozoa, though it is occasionally loaded with inflammation corpuscles. The urethra is often red and tender, but I think M. Lallemand's account of the condition of it is overdrawn. He speaks of the frantic dread patients entertain of a bougie being passed, and their cries of agony at the operation; phenomena which I have never witnessed, though I have examined far more cases than M. Lallemand appears to have seen when he wrote his work. Indeed,

[2] Dr. Diecnta examined 400 persons, 203 of whom suffered from spermatorrhœa, and found not an instance of day emissions among them.—*Studien und Erfahrungen iiber die Samenverluste.*

M. Lallemand grounded his treatment of this disorder on the dogma that seminal emissions are kept up by the highly irritable state of the urethra near the mouths of the ejaculatory ducts, a view which certainly only holds good to a very limited extent. Mr. Phillips also advocated[3] this view. Mr. Gascoyen[4] seems of much the same opinion; he says that if the irritable condition of the nerves continue, emissions may become so frequent and scanty as to occur almost without the knowledge of the person until they prove a source of injury to him. I have never seen this in the worst cases of day emissions; at night some few patients suffer in this way, but never, according to my experience, to any extent.

Pathology of Spermatorrhœa.—Dr. Carpenter gives[5] the following explanation of one great point in the pathology of this affection. "The secretion of the seminal fluid," he says, "being very much under the control of the nervous system, will be increased by the continual direction of the mind towards objects which awaken the sexual propensity. Thus, if intercourse be very frequent, a much larger quantity will altogether be produced, although the amount emitted at each period will be less."

I cannot say that I quite understand what Dr. Carpenter means, by stating that the secretions are very much under the *control of the nervous system.* Such obscure expressions as these have ever been the bane of medicine. A great deal appears to be said, but when we come to look for the sense, the pith of the matter, for something tangible, we find little beyond mere words and a *caput mortuum.* Secretions are so far under the *influence of impressions made upon the nervous system*, that violent mental agitation will increase some of them, such as perspiration, tears, &c.; arrest the expulsion of others, as that of the bile when jaundice is brought on by fright; or possibly interfere with the quantity or quality of the secretion in a third set, as in the case of dyspepsia produced by excessive anxiety, and so on. But I have yet to learn that any amount of mental activity directed to the stomach, liver, or pancreas will increase the secretion of bile or gastric or pancreatic juice (indeed, I am rather sceptical as to whether highly organized products can be increased beyond the normal amount, that is to say as regards their more important con-

[3] *Medical Gazette*, vol. 31, p. 452.

[4] *Brit. Med. Journal*, 1872, vol. 1, p. 94.

[5] *The Principles of Human Physiology*, by W. B. Carpenter, M.D., F.R.S., 1869, p. 827.

stituents, although, of course, the mass of water, mucus, &c., may be raised to an almost indefinite quantity); and yet this is what Dr. Carpenter's words may be fairly construed to mean, if applied to other organs than the testis. Judging from what I have seen, and especially from noticing that in many persons the excitement from connexion (in which the natural stimulus of the organs is brought into play) is so much less than when an emission occurs (when the organs are under the influence of an unnatural excitement), I should be inclined to assign much more importance to the nervous exhaustion than to the mere loss of semen,[6] the waste of the important constituents of which is possibly not much greater than in health; and if it be urged that we find this prostration when the semen is simply flowing away in the urine, or thought to be so, I reply that that is due to previous excitement.

"M. Lallemand," says Mr. Acton, "thinks that the brain has a great influence as a cause in inciting or exciting spermatorrhœa." I quote the phrase from Mr. Acton's work[7] because, from his reproducing it without comment, I presume that he endorses or at any rate understands it. I confess I do not. If M. Lallemand meant that some particular conformation of the brain coincides with a tendency to spermatorrhœa, that great anatomical development of it tends to produce or repress this disorder, why did he not say so? If he meant that great development of the thinking powers, of what in short is understood by "genius," fosters spermatorrhœa, then I submit with all deference that he is wrong, and that the biographies of eminent men afford no warrant for such a supposition; for I do not consider the revelations of that filthy wretch, Rousseau, any criterion.[8]

[6] "Masturbation shows its ill consequences in the female almost equally as much as in the male, though no exhaustive discharge be induced; and we, therefore, entertain the conviction, that the consequences to the nervous system and brain do not bear any relation to the spermatorrhœa (that is to say, the actual loss of semen, I presume) itself, but to the causes of that disorder, and to the nervous phenomena conjoined with them."—*Medico-Chirurgical Review*, 1864, January, p. 163. Dr. Humphry also considers the commonly-received opinion, that the debility is due chiefly to the loss of spermatic fluid, to be a mistake.—*A System of Surgery*, edited by T. Holmes, M.A., Cantab., vol. iv. p. 609.

[7] *On Diseases of the Urinary and Generative Organs*, 1851, p. 233.

[8] With the exception of this creature, and, possibly, Dr. Johnson, about whom there is just a suspicion that he suffered from this disorder, I have found nothing in the biographies of upwards of a hundred of the greatest men that runs at all counter to the opinion I have expressed.

Judging from the context, however, M. Lallemand possibly meant that this great influence of the brain is exhibited in those persons who, when children, manifest a precocious disposition towards venereal propensities; though I should have thought he might as well have invoked the influence of the brain in the case of those early predisposed to chorea or neuralgia.

I am inclined to say that the physique of persons constitutionally disposed to spermatorrhœa cannot be defined with any great strictness. No doubt a great many of these patients are excitable, nervous, delicate people, with a strong taste for sedentary pursuits and study; bashful and sensitive by nature, and endowed with a precocious disposition towards the other sex; but there are plenty of exceptions. I have seen some suffering very severely from the disorder, with every variety of physical conformation,—tall, bony men; strong, square-set, burly people; often persons of a most apathetic temperament, and no small proportion of men distinguished for excelling in active outdoor sports.

Involuntary emissions seem to me to arise from an irritable state of the testicles, vasa deferentia, and common seminal ducts. Dr. Humphry says[9] the real seat of the malady appears to be in the prostatic parts of the urethra more distinctly than in any other portion of the generative apparatus. Lallemand and Curling also found this part swollen and injected in some bad cases. Dr. Dicenta considers[10] that the seat of the disorder is in the muscular and contractile tissues of the ejaculatory apparatus, partly engendered by self-indulgence, partly brought on by other causes, such as gonorrhœa, constitutional tendency, neuralgia, &c. Whether any part of the urethra is affected or not, seems to me a subordinate question, as it is quite certain that we do not find this membrane affected at all in many cases, and only after the disorder has existed a considerable time in others. It may yield too, and yet the spermatorrhœa remain bad. This disposition appears to extend itself in obedience to some fixed law, regulating what I will venture for the moment to define vaguely as the "proportion of constitutions,"[11] to the par vagum

[9] *Holmes's System of Surgery*, vol. iv. p. 606.

[10] *Deutsche Klinik*, 1857, S. 179.

[11] If 10,000 people were taken in any part of England, we should find a certain proportion disposed to, or suffering from, certain diseases; as gout, rheumatism, skin diseases. If 10,000 persons suffering from skin diseases were taken anywhere, we should find a certain number suffering from eczema, acne, &c. This may illustrate what I mean by the law of "proportion of constitutions."

sympathetic and brain, and this in certain ill-recognised cycles. Thus in every hundred cases of spermatorrhœa, the surgeon will find a certain proportion in which symptoms of breathlessness and anxiety after exertion show themselves, another number in which the digestion is disturbed, and a third set where the brain is disturbed; or there may be any complication of these. The irritability in the testes may be set up by any slight causes in some persons, and when once established, a still slighter cause may aggravate it. I have elsewhere [12] tried to show, that there is pretty good ground for assuming that these organs may be affected by the electricity in the atmosphere to the extent of taking on inflammation, and it is certain that such disturbance in the electricity as precedes and accompanies thunderstorms, the equinox, close, muggy weather (particularly in early winters), and some other conditions not very well understood, will bring on emissions in persons liable to this disorder. For many years I have been in the habit of requesting patients to keep a calendar of their emissions, so as to see if the number were diminishing, and have repeatedly noticed that they reported such facts.

Again, it is certain that in some persons any great irritation set up in the brain, muscles, nerves, or stomach will produce an emission. Great anxiety or fatigue, dyspepsia, and neuralgia certainly have this effect. In this case, I presume, we have a reflex action, *the very counterpart of the other.* This may appear very bad physiology; but with that I have nothing to do. My business is to deal with facts: theory I leave to those who are fond of it in its present state, which I am not. I presume it is the fact of spermatorrhœa arising from such causes that has induced some surgeons to look upon it as merely one of the protean forms of nervous disorder; but what possible practical benefit they expected to arise from simply calling it nervousness, I am at a loss to see. The results of doing so are often lamentable enough to the sufferer. A patient suffering from emissions goes to a physician and tell him he feels less able to take exercise than before, that his faculties are impaired, and his memory bad; that he has a heavy oppressive feeling in his head, a general sensation of being muddled in the head or a stuffed-up feeling as if he were going to have a fit. Sometimes there is a discharge of mucus from the bladder and urethra after making water. Such patients have often been healthy, temperate and active. Sometimes the erections

[12] *On the Treatment of Gonorrhœa without Specifics*, 1871, p. 144.

have been much less perfect than they were. The physician tells him he is nervous, recommends tonics, change of air, rest, &c. The patient finds that tonics set up irritation, change of air makes him worse, and that the gloom and nervous sensations will not allow him to rest. He feels that he would be better at work, if he could bear occupation. Then he goes to some eminent surgeon and tells him that in addition to the other symptoms he has got spermatorrhœa, having derived this new fact from the discharges spoken of, and suddenly recollecting that he had committed masturbation at school, and that he had heard somewhere that imperceptible seminal emissions occasion such symptoms as he is labouring under. But the surgeon does not believe in spermatorrhœa, so he looks on the disorder as merely nervous, tells the patient there is no such disease as spermatorrhœa, and sends him on his way sorrowing. Perhaps he cauterizes him, or passes a bougie, both operations being, if unaccompanied by proper treatment, utterly useless, if not injurious. Then the patient wanders from one practitioner to another, and if he do not meet with some one who will grapple thoroughly with the disorder; purge his bowels well, blister the back of the neck and groins, put him on low diet, and cauterize the urethra, &c., till he has stopped the nocturnal emissions, he will go on injuring his health by the use of tonics and worrying about his symptoms, till he makes shipwreck of it. I am putting no imaginary case, I merely describe what I have heard scores of times.

Results of Spermatorrhœa.—Among the common but less serious symptoms induced by this disorder may be ranked inability to sustain fatigue, mental or bodily, or to follow up a fixed train of thought, and lumbar pains. Headache is not so common as might be supposed; but patients often complain of a sensation as if a blow on the back of the head had been sustained. Neuralgia is frequent enough and commonly attacks the face or head. Many patients suffer from pain after eating, with considerable tenderness of the epigastrium and a sense of fulness, eructations, flatulence, heart-burn, and excessive sleepiness after dinner: such patients are generally easily fatigued. Sleeplessness at night is sometimes mentioned; disturbed sleep, with continuous vivid dreaming, is not uncommon; or the sleep may be heavy and unrefreshing. Breathlessness and shortness of breath occur sometimes; not more, I think, than in other forms of exhaustion. Some degree of palpitation is not unfrequently complained of. In a great many cases the

urinary secretion is disturbed, or the bladder is irritable; phosphate and oxalate of lime are common. The more serious results are amaurotic and epileptiform symptoms,[13] epilepsy,[14] phthisis, insanity, paralysis[15] and death.[16] I have not observed such results myself, with the exception of insanity, of which I have seen several instances; but there seems no doubt about the facts themselves. Epilepsy seems clearly to have ensued in several cases from excessive masturbation. Mr. McDougall saw[17] three instances of this.

Prognosis of Spermatorrhœa.—1. When the patient is resolute and young, when the disease has not reached a great height, and has not induced structural change, I believe the case is always curable, and generally pretty easily; when the disorder depends principally on accumulation of sebaceous matter within the prepuce, it generally yields very quickly to proper treatment.

2. So long as there are even occasionally perfect erections, and the emissions awaken the patient, there is every ground for hope, and little cause for alarm, if the patient will attend to the case.

3. When patients have reached the age of thirty or upwards, when the emissions have continued for many years, when the interval between them is never very long, when there seems a strong constitutional tendency to the disorder, shown by its being called into activity by a very slight cause, and when there is a great deal of constitutional or acquired weakness, particularly with a tendency to dyspepsia, neuralgia, and cerebral symptoms, I believe the cure to be no easy matter, but one that taxes all the resources of the surgeon[18] and the resolution of the patient. Some writers, I am aware, adopt a different view, and therefore my readers must decide for themselves. I state what I have seen.

[13] *Holmes's System of Surgery*, vol. iv. p. 604.

[14] *The Practice of Medicine*, by T. H. Tanner, 1869, vol. ii. p. 212. "Connection of Spermatorrhœa and Epilepsy," by Dr. Russell, *Provincial Medical and Surgical Journal*, 1860.

[15] *Holmes's System of Surgery, loc. cit.*

[16] *Moriggia, op. cit.*

[17] Lallemand, *Practical Treatise on Spermatorrhœa*, translated and edited by Henry J. M'Dougall, 1847, xiii.

[18] "Im allgemeinen gehört die Heilung dieser Art Leiden zu den schwierigsten Aufgaben der praktischen Medicin."—Dieenta, *Deutsche Klinik*, 1857, S. 179. "Il male è cosi ribelle e grave, che l' arte deve ajutarsi nella cura di tutti i mezzi che le può fornire la morale, l' igiene, la terapia specialmente restoratrice."—Moriggia, *Giornale della R. Acad. di Medicina di Torino*, 1861.

4. In some depraved persons, who cannot be reclaimed from their habits of self-indulgence, or in whom structural change has been set up in the genito-urinary organs, the prognosis is more serious.

I have been surprised to see how some bad cases of spermatorrhœa get well. I know men, now married and fathers, whom I have attended for emissions occurring as often as five times in a week for three or four weeks together, and accompanied by very considerable impotence. As the organs seem to have naturally little power of reverting to healthy action, I can only conclude that this happy termination arose from the vigorous manner in which they carried out the discipline imposed upon them. But such vigour is only too seldom seen; the natural indolence of many men in these matters will always lead them to put off the evil day till it is too late, and then to blame the gods for the results of their own negligence.[19]

M. Lallemand, with all his genius and love of truth, has, as I have said, materially assisted in disseminating exaggerated views as to the influence of spermatorrhœa upon the health. In the case of a man who died of stricture, complicated with cystitis, and abscesses which completely riddled the prostate gland, he attributed death, not to these causes, but to the "profound alteration in the spermatic organs;" this "profound alteration" consisting in an abscess of the left testicle, the corresponding ejaculatory duct and seminal vesicle being full of pus. Now, such an experienced pathologist must have known that both testicles may be utterly destroyed by disease, or cut off, without the least permanent injury to health. Another patient had suffered from serious derangement of the nervous system and digestion long before a cerebral affection also set in; yet these were not enough, and the "growing influence of the seminal discharges on the whole animal economy" is called upon for help.

Mr. Acton seems to have no misgivings at all about curing the complaint. There are no "ifs" in his doctrine. The prognosis is as unerringly favourable as the treatment is easy, and he appears to meet with no refractory cases. "At a later stage," he says,[20] "when the disease has recurred so often as to impair the general

[19] Ἐξ ἡμέων γάρ φασι κάκ' ἔμμεναι· οἱ δὲ καὶ αὐτοὶ
Σφῇσιν ἀτασθαλίῃσιν ὑπὲρ μόρον ἄλγε' ἔχουσιν.

[20] *Diseases of the Urinary and Generative Organs*, 1851, p. 251.

health, or when the patient is naturally delicate, nutritious food, tonics, and sea air *cure the complaint.*" And again, speaking of the serious cases, he says,[21] "These patients *get well* under the repeated passage of instruments . . . . particularly when combined with astringent injections." I believe, however, Mr. Acton is the only writer of any experience who has expressed such an opinion. It is quite at variance with what I have seen.

Pathology of Impotence.—The function of generation being the most truly remittent of all we are acquainted with, being liable to cease for years, or even for life, without any injury to the health, may be supplanted by disordered innervation of some other part. By disordered innervation, I mean pain, either gouty, neuralgic, &c., in some *near* part, especially about the neck of the bladder, or else exalted function in some *distant* part, as indigestion, cerebral excitement; and by supplanted, I mean, that when these actions are set up, the function of generation lessens, as if the vital force necessary for it were absorbed by the diseased action. It may also be mechanically interrupted, as by stricture, &c.

I believe I was the first to point out to the profession that impotence might be brought on suddenly, or rather that a long-lurking tendency to it might be suddenly developed in persons advanced in life, by very slight and unlooked-for causes, such as injuries (*e.g.* fractures), neuralgia, pain, indigestion, cerebral excitement, long-continued fatigue, &c. As a matter of course, excessive connexion and masturbation, in an enfeebled state of the health, tend to induce this result, and very justly; he who recklessly yields to every prompting of sensual indulgence must count upon the forfeit.

As some of the conclusions thus drawn have been disputed, I venture to give a few cases.

Case 1. *From Neuralgic Pain.*—A patient, an elderly man, had suddenly become impotent; it had not occurred, as it mostly does, on the advance of old age, with a gradual decay, the emissions becoming less and less frequent; on the contrary, it had come on quite suddenly, and at the same time severe pain had set in at the neck of the bladder. This continued, with great irritability of the bladder, and pain at the glans penis; sometimes a little blood came after passing urine. He was sounded for stone, but none being found, it was considered ulcer of the neck of the bladder. To

[21] *Op. cit.*, p. 254.

relieve this, injections of nitrate of silver were tried; the first produced great pain, but some relief followed and a second was given; the pain after this grew more severe, and now never left him day or night. While at the height of his sufferings he was attacked with dysentery. I was in the country at the time, and on my return to town I found him rapidly sinking. He died shortly after, and I examined the body. Great part of the colon, and about eighteen inches of the ileum, were almost gangrenous; but nothing abnormal was discovered in the genito-urinary organs, except that the mucous membrane of the prostatic part of the urethra was of a vivid red; the testes, ducts, &c., seemed quite natural.

When Rousseau, in whom both cerebral excitement and spasmodic pain at the neck of the bladder, with retention of urine, occurred at a very early age, producing temporary impotence, died after a life of suffering, no organic change was found, although the organs were examined with the greatest care; so that the physicians concluded that his sufferings had been occasioned by a spasmodic state of the parts near the neck of the bladder, or of the neck itself.

Case 2.—A patient from the country laid his case before me, and soon after called to have my opinion on it; it was one of severe spermatorrhœa and impotence. He was a professional man; middle-aged, pale and dyspeptic, highly nervous, and had never enjoyed very robust health. According to his account, he had never had any symptoms till about two years previously, when they followed almost immediately on a severe attack of tic douloureux. Emissions at night began; being a married man, he abstained from connexion, and when at the lapse of a few months, he recommenced, he was alarmed at finding that it took place very imperfectly. He then consulted different surgeons, who ordered him sulphate of iron, and astringent mixtures, without much benefit. I found his digestion considerably impaired, and first of all attempted to set this right, and then prescribed quinine, cold bathing, and a blister.

The first attack on the disease was successful enough, and the emissions were speedily reduced to one a month. Soon after this he again came up to town, and informed me that though he had continued the medicine, diet, &c., as prescribed, the emissions were again becoming more numerous. Tincture of steel was now recommended, with another blister, a full meat diet, and active exercise. When I received my last communication from him, though his general health had considerably improved, the emissions occurred

once a week, in spite of attempts at connexion, and the impotence was decidedly worse.

Case 3. *From Gouty Pain.*—A gentleman, a strong, healthy, active man, in the prime of life, consulted me respecting impotence, of which he gave the following account:—After having been long tormented with flying gout, notwithstanding a very temperate life, he had been suddenly relieved from it in the great toe, the last spot it had settled in, and had been attacked with great pain in the urethra, and some difficulty in passing urine. A bougie was passed, and as the obstruction yielded and recurred very suddenly, the disease was pronounced spasmodic stricture; but from the history of the case, and having met with several very analogous instances, I am induced to suspect that gout in the urethra was the disease, and the stricture and impotence (which was not caused here by the stricture) were its effects.

Case 4. *From heightened Function in other Parts.*—A gentleman applied in extreme terror at having become suddenly impotent. As he appeared young and healthy, I felt surprised at this. It turned out that having neglected his studies until his examination was close at hand, he had become alarmed, and had betaken himself to them in the most irrational manner, going to bed with his book in his hand, ready to begin in the morning, and sitting up in bed to sleep, for fear, if he lay down, he should sleep too long. He had become exceedingly nervous, and found that on thinking of connexion vigorous erections came on; but that, on attempting connexion, they immediately subsided, and, while subsiding, emission took place. Quiet, relaxation, and mild aperients soon restored the balance of the functions.

These cases are far from uncommon. Intense mental application, confinement, and inattention to health, may, especially in young, irritable, unhealthy subjects, when they at the same time impair nutrition, easily bring on a state of temporary impotence, which the fears of the patient soon magnify into something of alarming importance. It would be well if all forms of impotence were as remediable as this, which is generally subdued by exercise, society, relaxation, and such measures as tend to improve the health.

From Stricture.—When impotence comes on in patients still in the prime of life, as from forty to fifty years of age, the emissions growing gradually more feeble and fewer in number, a mere sensation accompanying them, like that of evacuating urine, or passing fæces,

stricture may often be suspected. It is the more important to attend to this, as many of these patients persist in stating that the stream of urine is as large as ever it was; or, never having had gonorrhœa, and having heard that strictures follow upon neglected disease of this kind, they cannot understand how one can occur without the other. In cases of this class the stricture appears often to arise from a fold of the mucous membrane growing up,—a fact shown in the relief given by the application of a *film* of caustic on a bougie, on the principle so ably advocated by Sir Everard Home, or the use of the instrument I have elsewhere described.

Case 5.—I dissected, with great care, the genito-urinary organs of a gentleman who had died of irritative fever, consequent on an operation performed for the relief of an impermeable stricture. He had become impotent about the time he began to notice a material diminution of the stream in passing urine. On examination, the urethra was found extremely narrowed near the bulb. Close to this part were two passages, one lying behind the other; they were on the lower side of the urethra, and were both larger than the contracted part of the tube: they were about four lines long, and were lined throughout with mucous membrane; the posterior lip of the second almost entirely overlapped and occluded the natural opening. No instrument could have been introduced into the bladder, and the exit of urine could only have taken place by the force of the stream pressing down the valve-like fold of mucous membrane; that of the semen must, I think, have been very imperfect, if not impossible; and I am induced to believe that this case might have been advantageously treated by caustic, as I have suggested. I have cured in this way cases which appeared to me very similar,—for no two are exactly alike, and invariably adopt it when there is a false passage difficult to steer clear of.

Case 6. *From Injury of other Organs.*—I was consulted by an elderly gentleman, who stated he was impotent. He was, and always had been, in the enjoyment of a fair amount of health. Like many of our most successful citizens, he owed his success in life, which had been considerable, to his integrity and his own labour. He had passed through the most arduous part of his toils, and retired to a distance from London, from whence he could come up daily to town and transact such business as required his presence. He had married early, and lived a regular, temperate life, subject only to slight fits of indisposition, which interfered little with his

general health. His wife bore him several fine children, and he had never committed any excesses. He had latterly become impotent, which, upon minute questioning, appeared due to the following circumstances :—"About five months previously his foot had been severely crushed, owing to a heavily-laden vehicle passing over it. He was attended by an eminent surgeon, who succeeded in making an excellent cure. The severe nature of the accident for several weeks necessarily precluded all attempts at connexion with his wife, which had continued much as usual up to this time ; but as he began to recover, he grew more and more uneasy at finding that nearly all desire, so far as was manifested by erections, seemed to have left him, and that on essaying connexion, the penis remained quite flaccid."

The particulars of a case were communicated to me by a friend, in which impotence seem to have resulted from an injury to the arm and corresponding side of the trunk. Several other cases have been collected by friends and noted down by myself, but being anxious not to swell the bulk of this work I omit them.

Case 7. *From Excitement and Natural Irritability of the Organs.* —In addition to similar facts recorded by other writers, I venture to give the following :—"Mr. C. consulted me. He was twenty-four years of age, healthy, but subject occasionally to a little indigestion and costiveness. He was easily excited, of a shy, retiring disposition ; owing to which, and his rooted dread of infection, he had never ventured on connexion. Some years ago he suffered from irritability of the bladder; the case was rather obscure, and at the wish of his medical adviser he consulted Mr. Syme, who sounded him, but found neither calculus nor stricture. About five years ago he began to notice an occasional emission, which was repeated at long intervals, for about four years and a half, when having resolved upon marrying, the emissions began to grow much more numerous, and shortly amounted to nearly one every night; they were seldom less than three a week. He was greatly excited about his marriage, and to this he attributed the frequency of the emissions. When he married he found himself quite unable to perform connexion. I carefully examined the testes and penis; they were well developed, and the urethra was perfectly free from stricture."

From long-continued regular, but moderate Connexion.—In some persons the organs require longer or shorter periods of repose. Marriage and moderation are not always a safeguard ; and unless

the warnings of Nature are promptly listened to, temporary, if not permanent, impotence may follow.

Case 8.—A gentleman consulted me on account of impotence. He had enjoyed tolerable health, but had always been rather subject to headache, constipation, and catarrh. At times during the last year or two, he had been attacked by indigestion, till then an unknown complaint to him. This he ascribed, in part, to the long-continued easterly winds, which not only made him feel ill, but also thoroughly wretched, from the dry dusty feeling they occasioned in his skin, and even in everything he touched, and excessive languor. He suffered little when they were accompanied by rain; and during one wet autumn he was quite well, though often drenched to the skin. Some share of the blame might justly, I think, be laid upon his habits; for though extremely temperate, he was a smoker, took little exercise, and was rather slothful. Up to his twenty-second year he had rarely indulged in connexion. When little more than twenty-three he formed an illicit connexion with a lady in his own rank of life. This was his only excess, and it was not a great one. From that time till his marriage, which took place in his thirtieth year, he was far more continent than most men, and even after marriage he committed no excess, but almost from that day till I saw him, he had (with the exception of the time of his wife's first confinement) had connexion once in the twenty-four hours—this had gone on for two years. Latterly the emissions had frequently taken place while the penis was but little erected.

My advice was that he should instantly give up connexion for a year or two. "But do you not think," he said, "some part of this is owing to my health? That tonics would do me more good? I am sure I have grown steadily weaker these last twelve months." Of course anything rather than self-control.

To describe all the forms under which impotence, from excess, presents itself, would occupy more space than I can possibly devote to it, so infinitely varied is the constitution of the great human family; there are one or two sources, with a notice of which I must conclude.

From Nervousness and Disuse of Function.—A young gentleman calls upon a surgeon, and tells him he has committed masturbation in his youth, but gave it up so soon as he was aware of what he was doing. He is now impotent. He has attempted connexion and failed. Possibly he is married, or, more perplexing still, on the very

brink of marriage, and driven half frantic at the prospect of not being able to consummate marriage. He has never had any venereal disease, or at the utmost a slight gonorrhœa. He never carried self-abuse to any excess, or suffered much from emissions till lately, but he has heard enough and read enough in some infernal quack book to frighten him. Does the surgeon hold out any hopes to him of a cure? There is no reason to the contrary, beyond his nervousness. Let the surgeon put in force Mr. Hunter's admirable practice in an analogous case, let him simply direct the patient not to attempt connexion till the desire for it becomes overpowering, and all will go well.

Again: A patient under similar circumstances has had connexion, and suffered from spermatorrhœa. After considerable trouble his surgeon has cured him, and then learns that his patient has lost all desire for connexion, and hence conceives his case beyond relief. Perhaps, still worse, he tells us, with a moody downcast look, he is afraid of relapsing into his old habits. But why has he failed? There is no fact in pathology better established than that a part, as a muscle, if never exercised, will waste and become impotent. And although the function is here more intermittent than in muscular motion, yet it is quite contrary to reason and analogy, to suppose that a forced unnatural disuse can fail to affect its capacity; the natural corollary then is, to restore nutrition and power by resuming that function for which, and not for conducting off the urine, it was clearly formed.

Case 9. *From Continence.*—A gentleman consulted me for seminal emissions. He was six-and-twenty, delicate-looking, and highly intellectual. He was an ardent student, and from moral motives had never indulged in connexion; he had never fallen into the habit of masturbation, and did not contemplate marriage at present. Emissions had come on many years previously, had run through their worst phases, and now were diminishing in number; they had ceased to produce any sensation, and were becoming smaller in quantity; erections, even when he was exposed to excitement, were imperfect. I startled this patient, who had never done anything for his complaint, by telling him that if he lost another year he would become impotent.

But this was undoubtedly the case. In fact, a man who remains continent can hardly reach twenty-six without becoming partially, if not wholly, impotent. At twenty-five there is a risk, and I am not quite certain that he is safe at twenty-four. This may seem a bold

assertion, but it will stand investigation, though I must admit that cases of an opposite class are precisely those which are least likely to be seen by the surgeon.

One cause of impotence has attracted considerable importance. It is that in which a man is only impotent at certain times, or with certain persons, and was defined by Mr. Hunter as resulting from "a want of due harmony between the mind and body;" in its mode of operation it is exactly similar to that form of impotence in which the patient is beset with the fixed idea that he is incapable of performing connexion, and fails accordingly; as a man breaks down in a difficult leap when he is convinced that he cannot succeed.

The fact is undoubted; and I believe I may say, that if it be not generally known among medical men, it is because these matters have been so neglected. This want of harmony is very common among spermatorrhœa patients, and there is a form of it peculiar to them; that is, when men have become alarmed and attempt connexion, just to see whether they are impotent or not. Under such circumstances they generally fail, as might be expected, and the result is greater alarm and certainty of failure the next time than ever, although there is really not the least necessity for either.

Hunter seems to have been disposed to ascribe to the mind more control over connexion than I think can be conceded to it. He defines copulation as an act of the body, the spring of which is in the mind. We must in that case admit the presence of mind in all the lower animals, as they not only desire it as powerfully as man himself, but struggle for the possession of it with a ferocity in no way second to that evinced by him. Bird, beast, and insect fight to the very death for their mates; the male salmon pursues or accompanies the female for hundreds of miles and engages in the most desperate conflicts in order that he may fertilize her spawn; the butterfly braves death and capture to reach the female insect. Besides, it is most certain that men are powerfully impelled to connexion even when their better reason (or mind) condemns the act. I am therefore rather disposed to view the desire for copulation as an instinct in man's natural state, *as certainly called into action by its normal exciting cause as the expulsion of the contents of the bowels and bladder is brought into play by the presence of fæces or urine*, but more capable of being subjugated by the will, especially when the desire is feebly developed, as sometimes happens in men of very weakly frame or great mental capacity.

Cases of impotence have been recorded from strange causes, and in others the impotence has been attributed to one cause, while one more potent has been left unnoticed. Wehle, for instance,[22] gives a case of impotence from inhaling the smoke of henbane to remove the toothache. Now spermatorrhœa and a certain degree of impotence do occasionally follow severe toothache. I have known as many as twenty emissions succeed a bad attack of neuralgia where the patient was previously almost free from them, and I think it is probable that in M. Wehle's case the loss of power was due quite as much to the toothache as the henbane, especially as sedatives are often prescribed in large quantities without inducing this effect.

One might imagine that a patient would receive a hint that he was becoming impotent with alarm. Strange to say, the more confirmed the case the less prevalent do we find any feeling of the kind, and often when the patient has reached the prime or decline of life, it seems to be regarded rather as a relief.

In one of the earlier editions of this work I pointed out the extraordinary feeling of cold some of these patients suffer from. A sense of cold in the scrotum, sometimes in small patches, sometimes attacking a surface as large as the palm of the hand, is not uncommon in many persons in whom impotence has commenced, and I have seen it prevail to an extraordinary degree in some persons who had allowed the malady to go on unchecked for a long time, even extending over the whole surface, the limited form, however, being much the most common. One man, when slightly undressed in my presence, shivered with cold, though it was June ; another, a strong burly-looking countryman, told me, that even in the south of France he could walk out on the hottest day wrapped up in a great-coat ; "he was never warm," he said.

A gentleman, a strong wiry-looking man, very fond of field sports, a keen shot, good angler, and remarkably bold climber, told me that he was constantly sensible of a feeling of cold in the testes and scrotum, even in the hottest weather, and that this increased when he was out of sorts. Dr. Dicenta has noticed the same thing. In 155 cases of spermatorrhœa he observed a feeling of cold in the genitals in five, and loss of internal warmth in nine.

Causes of Permanent Impotence.—What does impotence arise from,

[22] *Oesterreich. Med. W. Schrift*, 1843, No. 24.

is a question constantly asked. There are, I presume, only two modes in which it can occur—viz., by the agency of injuries or exhaustion. The former may act by destroying, dividing, or compressing the nerves leading to the generative organs; the other apparently by causing such excessive action as to set up changes in the structure of the nerves, which, though not perceptible at first to the eye or microscope, are yet quite sufficient to prevent the exercise of their natural function.

We cannot certainly demonstrate such a hypothesis as accurately as we do the binomial theorem, or prove the weight of Jupiter against the earth, but we have some pretty strong proofs. We know the nervous structures are implicated to a great extent in this function; we know that excessive action has been set up previously, and that excessive action will produce alteration of tissue, as in inflammation; and it appears to me a legitimate conclusion that this is what happens here.

Prognosis of Impotence.—Impotence consequent upon wasting of the testicles, severe injuries, and disease or softening of the spinal cord is necessarily incurable. Long-continued, steadily increasing impotence from excess, *especially when the patient has passed his thirty-fifth year*, must be regarded in a very unfavourable light. All other cases may, I think, be cured.

3. *Vesicular Gleet, Urethral Gleet, &c.*—Vesicular gleet, often described as a passing of semen, and ranked by M. Lallemand as one form of diurnal pollution, is a discharge at stool of glairy, tenacious mucus, supposed to be the contents of the seminal vesicles and occasionally of mucus from the prostate. It is not always due to masturbation, venereal excesses, or venereal diseases, though any one of the three may bring it on. It is most assuredly not a discharge of semen, such, for instance, as is thrown off in an emission. The complaint, however, demands as much attention as if it were what it is supposed to be, especially as the patient's sufferings at times are anything but imaginary; for though a mere mechanical effect of constipation and an irritable state of the vesicles—though it rarely produces any debilitating effects when not anxiously noticed by the patient, yet no sooner do some persons see it than they jump at the conclusion that they are losing semen, *and nothing can persuade them to the contrary.* A man finding that there is written authority for this view is soon in a position to make himself truly miserable. In vain does the surgeon tell him that the disorder is a simple,

harmless affair; he may spare himself the trouble of giving any explanation of the matter.

A gentleman, eight-and-twenty years of age, whose constitution had been shattered by a residence in India, and who was under my care for this affection, gave me an account of his sufferings, which I was inclined to think exaggerated till he called on me one morning in a state of depression which quite justified all he said. He looked ill and prostrated to the last degree; his pulse was small, rapid, and thready. The night before he had had a discharge of this kind, followed by a slow oozing of grumous-looking fluid, almost like coffee-grounds, which continued several hours; some of the stains were visible enough on his linen. As I had carefully diagnosed the case, and had found nothing the matter with the bladder, urethra, prostate, or testicles, while there was very distinct evidence of vesicular gleet, I thought it most likely that his discharge came from the vesicles. In another case, where the patient, a healthy man, of very active habits, was rather prone to underrate the severity of his symptoms than to dwell upon them, his brother, a surgeon, told me that he had often seen him coming from the water-closet as pale as a ghost after one of these discharges. I suppose the sensation of passing this mucus had the same effect upon him that the sight of blood has upon some persons. In another person, a farmer, there was the same physical depression. Mental depression is not an uncommon result.[23] I have had under my care more than one medical man suffering from this disorder, who, though quite aware it was harmless, could not throw off the disagreeable impression it produced.

Mr. Hunter says[24] "Diseases of the vesiculæ seminales are very familiarly talked about, but I never saw one. In cases of very considerable induration of the prostate gland and bladder, where the surrounding parts had become very much affected, I have seen these bags also involved in the general disease, but I never saw a case where they appeared to be primarily affected." Mr. Bransby Cooper also, after telling us,[25] that though they (the seminal vesicles) are rarely diseased, yet that they have been found after death filled with cheesy matter, adds the important fact, that "there are *no* symptoms developed during life indicative of the change that has occurred;"

[23] See also *Medical Circular*, 1858, p. 255.

[24] *On the Venereal.*

[25] *Medical Gazette*, vol. xliii.

and this view, which is most assuredly correct, receives strong confirmation from two cases of abscess of these organs related by Mr. Henry to the Medico-Chirurgical Society in 1850. In one, the seat of the abscess does not seem to have been detected till after death; in the second, it was revealed *by accident at the end of three weeks;* so that we may assume the symptoms were not very characteristic, and that those which are supposed to indicate the so-called diseases of the seminal vesicles are, in point of fact, for the most part imaginary or delusive.

Indeed, these organs seem to perform no function in the human frame, any more than the thymus and thyroid glands, &c., which have embroiled the brains of so many excellent observers. The evidence in favour of the view that they are receptacles of the semen amounts to this, that spermatozoa are occasionally found in them, and that when an emission takes place, their contents are also emptied. As to the mere convictions and assertions of some writers, they are so entirely unsupported by any proof that I must leave them on one side.

The evidence on the other side is overwhelming. Long after the testicles have ceased to secrete, the vesicles continue to fill as usual, and are now and then emptied by the pressure of a hard stool. I examined the body of a pauper eighty-four years old, who had died in St. Luke's workhouse, then under the charge of Mr. Courtenay, of Finsbury, since dead. The seminal vesicles were as full of fluid as in a young person, but the testicles at this advanced age must have long ceased to produce semen.

M. Dieu, in 105 autopsies of men between the ages of sixty-four and ninety-seven, found [26] no spermatozoa in 64, of whom 4 were nonagenarians. Of the remaining 41, 14 showed spermatozoa more or less truncated. There is no mention of absence of the usual fluid in the seminal vesicles, though in some instances it had undergone peculiar changes.

In fact, they secrete in persons who have been castrated, and M. Gosselin found the seminal vesicle full when the cauda epididymis of the corresponding side was quite obliterated; a fact of itself sufficient to overthrow the theory. When one testicle is lost, the corresponding vesicle suffers no atrophy. Now, were their function to receive semen, what we know of the physiology of

[26] *Journal de l'Anatomie et de la Physiologie*, 1867, pp. 449—471.

similar structures would teach us to believe that *they would waste so soon as they were no longer required*, or rather, exercised. There is nothing in their structure to forbid this; on the contrary, they belong to that class of organs most likely to contract upon themselves when not periodically expanded.

Mr. Hunter, speaking of the generally received view (that the secretion thrown off at stool is semen), remarks that is not of the same colour, and that it attacks those who have just had an emission of semen. A man not given to any excesses may have a discharge of this kind and connexion shortly after. We are told that it has the peculiar smell of semen,[27] but the fact is that the semen has no smell; the smell from the fluid ejaculated during connexion is due to its being mixed with other secretions, as those of the urethra, prostate and Cowper's glands.[28]

An expulsion of this mucus produces no ejaculatory sensation when passing along the urethra, as always occurs in those rare instances when a real emission happens at stool. All that the patient is aware of is that a bulky body is traversing the canal.

Dr. Humphry is of opinion[29] that it proceeds apparently from the prostate gland, but it appears to me that the quantity discharged is too large for the gland in its healthy state, and I therefore suspect that the vesicles and Cowper's glands are also implicated.

To what purpose is the semen stored up in the vesicles, when we know by the fact of seminal emissions being tinged with blood in patients labouring under orchitis, that these glands are also emptied during the act? Messrs. Kirkes and Paget say,[30] in order that the development of the spermatozoa may be effected, as they hold that it is not achieved till the semen has lain "*some time*" in the vesicles. *Then the perfecting of the spermatozoa can have little to do with impregnation*, as I believe it has several times happened, that a man, in overcoming the resistance to his wishes offered by a female, has had an emission, and yet has, in a second more successful attempt, impregnated her within a few hours after. Again, these gentlemen hold[31] that the semen is probably continuously secreted and passes

[27] Lallemand.

[28] Kölliker, *Handbuch der Geweblehre des Menschen*, 1852, S. 497.

[29] Holmes's *System of Surgery*, vol. iv. p. 607.

[30] *Handbook of Physiology*, 1848, p. 611.

[31] *Handbook of Physiology*, by W. S. Kirkes, M.D., 1867, p. 693.

away with the urine, or is ejected from the urethra in the act of defæcation. But in this case the spermatozoa must be broken up so as to be no longer recognizable, or we should find them occasionally.

As to the testimony of the miscroscope, I can only say that I have examined the discharge in scores of cases, and have also called in the assistance of friends much more skilful than myself, but the result of our labours was a conviction, that beyond the fortuitous appearance of a few stray animalculæ, the presence of spermatozoa in this fluid and the urine is for the most part a mere myth,[32] and I was surprised to see Mr. de Méric speaking of[33] this slight symptom as a disorder, insisting that there is such a disease as spermatorrhœa, and that *this* is the disease ; all because the microscope shows a few spermatozoa in the fluid voided after straining. To speak the plain truth, the profession has of late had more than enough of the microscope and test-tube, and sensible men are beginning to feel, that it is of more consequence to improve the treatment of disease than to trace a disordered secretion to sporules and cytoblasts, fungi and cell-growth, which will vanish with returning health. Medicine is not a science, it is an art ; to be useful it must be founded on laborious observation of facts, and a correct application of first principles (which alone constitute a science if terms are to have any meaning) ; and those who practise it will always have to use these scientific investigations as an aid and light to the teachings of experience, not as a substitute for that which science in its present state cannot teach. In every age we may see men so stultified by extreme, abstract wisdom, that they can no more understand practical truths than the philosophers of the "flying island," who could demonstrate by rhomboids and triangles how a house should be built, without being able to make the walls straight ; or Monsieur le docteur Tomés, who knew that a man already dead of fever could not have died, because the critical day had not arrived. Such

[32] "I have examined this fluid passed by several persons, and have never found any spermal elements in it."—Holmes's *System of Surgery*, vol. iv. p. 607.

On the other hand Dr. Kirkes says, in his *Handbook of Physiology*, "The fluid-like mucus, also, which is often discharged from the vesiculæ in straining during defæcation, commonly contains seminal filaments."—P. 695. Dr. Griffith also, in a case related by Mr. Acton, found spermatozoa in the fluid passed after straining.

[33] At a meeting of the Harveian Society, Dec. 7, 1871.

people may be left to cherish their particular views; they are as well occupied in that as in anything else.

The theory has been put forward that the seminal vesicles contain semen and are the principal organs affected in spermatorrhœa, on the ground that seminal emissions occur after castration; but the facts observed prove the very reverse; for in castrated persons, though erotic dreams may appear, with a discharge from the vesicles, Cowper's glands, &c., yet the patients become every month more insensible to their occurrence, while they steadily decline in number from the want of the presiding organ. In those deprived of the testicles in early life there is often a considerable amount of desire, but they never feel the sensation of connexion, any more than a man born blind ever enjoys the sense of sight, though he may desire to see as much as other people. And if emissions of this imperfect kind occur after castration, what does the fact prove? Simply that the subordinate parts continue to act after the essential organ is removed, much as they did while it remained *in situ*.

Involuntary Passage of Semen.—Excluding cases in which the semen is passed by erection and jactitation (involuntary emission), and those in which it is expelled after straining (vesicular gleet), we have remaining only one form—that of imperceptible expulsion of it into the bladder, from whence it is extruded with the urine—a disorder of which we hear a great deal and see very little, since few, very few, instances have occurred in which this took place to an infinitesimal amount; but in a shape of sufficient severity to do mischief no human eye has yet seen it, or probably ever will. Mr. Gascoyen has never witnessed[34] such an affection, and very properly doubts its existence. For all these reasons I feel myself quite justified in rejecting it from classification, and relegating it, along with a cognate subject (that of spermatozoa forced into the urine by straining) to the section on urinary deposits, where the reader will find what I have got to say under the head of "*Spermatozoa in the Urine.*"

Urethral Mucous Gleet.—Another of those affections which occasion some nervous patients extreme anxiety, is a discharge of mucus after erections. Delicate, sensitive men, remembering the follies of boyhood, set it down at once as spermatorrhœa; and the

[34] *On Spermatorrhœa and its Treatment.* By George G. Gascoyen, F.R.C.S., Surgeon to the Lock Hospital, &c. *British Med. Journal*, 1872, vol. i. p. 67.

surgeon must either treat it in earnest or lose his patient. When I have told the patient that he really only noticed it because he was always worrying himself about this malady; that he had all his life, and always would have, a secretion of mucus after powerful erections, and that such a discharge was common to every son of Adam, *though, perhaps, more abundant in relaxed than in high health*, I have generally found him incredulous; some one had told him, or he had read in some book, that semen was discharged in this way, and this was quite enough. I soon saw argument was useless, and now always apply myself to the cure of the principal affection without disputing the point, and, happily, as the patient improves in health, he usually takes a less morbid view of such petty matters.

As, however, mild injections never do any harm in these cases, and are often serviceable in relieving the weak and irritable state of the urethra, besides quieting the mind of the patient, I see no objection to their use; and in the section on treatment the reader will find, what I hope are, sufficiently full directions for the employment of this remedy.

In other cases, discharges of this kind occur at night, and are described by the patient as real seminal emissions. The principal symptom is a number of small, dirty, pale stains on the linen, without any erotic dreams. I have seen cases in which copaiba had been given, under the supposition that these patients were suffering from gleet.

In some rare cases there is a copious discharge of mucus, mixed with a certain amount of pus, which looks very much like the discharge in gleet after gonorrhœa, only that it is present in greater quantity, more like the amount thrown off by women in the declining stage of leucorrhœa. It appears to come from the whole of the urethra in some persons, as I have found this canal tender all the way along. In one instance I saw it accompanied by balanitis of the same kind. The patient had two or three attacks while under my care, and had had several previously. He knew when one was coming on, and having observed the premonitory symptoms, promised to call and show me the discharge in full bloom, and kept his word. There was not the slightest reason to suspect any venereal affection in this case; and, strange to say, though the inflammation of the urethra and prepuce was so extensive and evident, the emissions were not severe. This strange form of discharge yielded easily to injections of nitrate of silver.

Affections of the Prostate Gland constitute another of the imaginary evils with which many of these patients torment themselves. There can be no doubt that they are anything but imaginary in many persons who have passed the meridian of life; but as a sequel of spermatorrhœa in young people they must be extremely rare, as in many hundreds, I may say thousands, of cases, I never saw this complication except once or twice, in the form of chronic simple prostatitis, in concurrence with diseased bladder.

Patients who find that they cannot expel their stools without straining are often alarmed by noticing that this act is followed by a slow draining of mucus from the urethra, and then arrive at the conviction that they are suffering from spermatorrhœa, or some affection of the prostate; but this symptom has no such importance; it is probably only the relic of a very slight attack of cystorrhœa of the neck of the bladder, or the mucous membrane overlying the prostate, brought on by gonorrhœa or cold, sometimes possibly by excessive masturbation, and generally yields easily to suitable treatment.

Cystitis.—Though a rare result or accompaniment of spermatorrhœa, yet I have seen cystitis in a few instances occur along with this disorder; and in some persons I have seen a discharge after making water, of thin yellow mucus, which passed along the urethra, quite different from the mucus of the vesicles. This form of disorder was not accompanied by any painful symptoms. It is not dangerous either, but it exerts a very depressing influence upon the patient's mind, and is generally found associated with a low state of health. It is not in any way necessarily connected with either gleet or gonorrhœa.

The worst case I ever saw was that of a patient under the care of Mr. McDougall, the translator of Lallemand's work. He was in shattered health, and had never been strong. He suffered from a most severe retractile stricture, and appeared to be slowly sinking under the irritation caused by it. His face was blanched, and had a singularly care-worn look. He did not expect to be cured, as Mr. McDougall, in whom he had great confidence, had given a very unfavourable opinion of his case. This patient two or three times, when consulting me, withdrew to the water-closet, taking with him a cup of gutta-percha tissue for the penis, and brought it back with quite half a wineglass of thin yellow mucus in it, passed after emptying the bladder.

I have met with many cases since, some very severe, but none which could be fairly said to approach this. Such an amount of discharge, however, as will aid in establishing the diagnosis is not uncommon.

Sediment in the Urine.—We now come to the most fertile source of misery for these patients, as I defy even the genius of a Spanish inquisitor, and that is saying a good deal, to invent such a simple, and yet perfectly efficacious mode of torture, as to propagate the idea, that sediment in the urine, such as we find in spermatorrhœa, is, as a rule, of the slightest moment. No practical surgeon would, in his own case, undergo a regular course of treatment for such a symptom, unless there were decided signs of structural change, or a highly disordered state of the kidneys, and this is not a common occurrence in spermatorrhœa. I have not seen pus in the urine above three or four times in this complaint.

However, if the patient has had the misfortune to get hold of some work with just enough of truth in it to do serious mischief, he may, by the aid of the microscope, frighten himself to his heart's content. Spermatozoa in his urine he will rarely find, but he may detect some very appalling forms of crystals, and then, if he does not die on the spot from sheer dread, he is in a fair way to become an excellent subject for experiments. I have generally told these patients that all forms of deposit from the urine will pass away as the health improves, and that there is no more necessity for devoting any special treatment to them than to "the dark ring under the eyes," and "the uneasy sensation after making water," which have helped to fill the pockets of so many advertising swindlers; but I have mostly found that though I might silence I could not convince them.

As, however, the state of the urine will sometimes require a certain amount of special attention, I proceed to offer a few practical remarks on the diagnosis and importance of certain urinary deposits.

Diagnosis of Urinary Deposits.—In severe cases of emissions, attended with exhaustion, dyspepsia, rheumatism, cystitis, or stricture, or any combination of these, the surgeon will find *the deposits most usually met with when such complications are present without spermatorrhœa, and he will meet with no others*, unless it be now and then a few stray spermatozoa. I do not in any way gainsay the observations of other writers when I state that my own are distinctly

adverse to the existence of any pathognomonic sign of spermatorrhœal urine. Still every person who investigates this fluid will frequently meet with urates, uric acid, phosphates, oxalate and oxalurate of lime, mucus and pus.

I at once admit that the observations, on which the above-given conclusions are founded, were limited to a search for the most usual constituents of disturbed urine; indeed, I need scarcely say, that no person busily engaged in practice could submit the urine of several hundred patients to anything deserving the name of analysis. I do not know how some of those gentlemen manage who get at the secret in such a very speedy manner; but considering that a proper examination of a single specimen demands that at least thirty processes should be gone through, I should think something like a week was requisite for this purpose; and now that we have such very recondite processes as chemolesis and physiolosis, and such complicated products as indican and uromelanine [35] to hunt for, analysis can only be undertaken by those who are in a position to devote a large amount of special study to it. Consequently I wish to be understood as saying, not that no other disturbing elements were ever present, but that the deposits spoken of were those usually met with, and that only simple means were employed to detect them. At one period I spent, or rather, I may say, wasted a great deal of time and money in more elaborate observations, but as I found nothing that repaid the search, or that served in any way to throw light on the pathology of the disorder or its complications, I gradually abandoned the experiment.

Phosphates.—Deposit white, sometimes ropy. Insoluble by heat and in solution of ammonia or liquor potassæ. Soluble in acetic acid and dilute hydrochloric acid. Wholly or partially dissolved by nitric acid. Urine generally nearly or quite neutral, or even alkaline, but may be acid. Of high specific gravity, varying in colour from pale to deep brown; not unfrequently contains also mucus and blood; often covered with an iridescent pellicle. White amorphous deposit, not acted on by liquor potassæ, indicates phosphate of lime. When the deposit is visibly crystalline, it is either neutral triple phosphate, or bibasic triple (alkaline) phosphate. In the former the crystals are prismatic or penniform; in the latter, radiated or foliaceous. Frequently preceded by great wear and

[35] The formula for uromelanine is C 36, H 43, N 7, O 10.

tear of the system, injuries, &c. Accompanied, especially when the phosphate of lime is absent and the urine is of a deep amber hue, by dyspepsia, restlessness, irritability, mal-assimilation and great loss of strength.

Carbonate of Lime.—Occurs with phosphatic deposits. Deposit visibly crystalline. Crystals radiated, foliaceous, or dumb-bell shaped. Insoluble in ammonia. Soluble in acetic acid with effervescence.

Oxalate of Lime.—Deposit white; visibly crystalline. Insoluble by heat and in potass, ammonia, and acetic acid. Dissolves without effervescence on addition of nitric acid. Crystals octohedral. When dumb-bell shaped, with the same characters, oxalurate of lime is present. Urine often darker than in health, sometimes contains excess of urea or epithelial cells; generally of high specific gravity, as from 1·025 to 1·030. Often accompanied by great depression, physical and mental, wasting, nervousness, loss of energy, dry state of skin, and dark unhealthy complexion. A tendency to boils is said to accompany it, but I have not been able to confirm this. Irritability of the bladder and great tenderness of the urethra are not unfrequent concomitants. May follow application of cold over lower part of spine, mechanical violence to the region of the kidneys, the hasty or unskilful passing of a bougie or catheter, great excitement of the genital organs. The influence of the two latter is very questionable.

Urates.—Urine acid, generally of low specific gravity, 1·012 to 1·018. Deposit pale, amorphous, but may be also marl-coloured, pink, or reddish. In latter case, if slowly soluble by heat, purpurine is present with the urates. Deposit disappears under action of heat or on addition of liquor potassæ or liquor ammoniæ. When visibly crystalline and the crystals dumb-bell shaped or spherical, with or without spicules, urate of soda is present. Frequently appears after checked transpiration, catarrh, &c.; often more copious after eating freely of animal food. Urate of soda common in gout and rheumatism.

Uric Acid.—Deposit yellow, pink or red; visibly crystalline. Crystals dumb-bell shaped with fringed edges, lozenge shaped, square, hour-glass form, or some compound or modification of these. Deposit dissolves when heated with liquor potassæ. Often found when there is a good deal of emaciation or exhaustion from fatigue, mental or bodily, or both; acute inflammatory disorders,

gout, rheumatism, and sometimes functional disorders of heart, liver and spleen; pyrosis, deficient perspiration, &c. Deficient in anæmia.

Cystine.—Deposit white; always crystalline, never amorphous. Insoluble by heat; soluble in ammonia. Crystals, hexagonal plates. Urine has an odour of sweetbriar; when kept, becomes covered with a pellicle composed of crystals of cystine and ammonio-phosphate of magnesia. Specific gravity usually low. Generally connected with disordered nutrition.

Pus.—Urine coagulable by heat; generally acid or neutral. Deposit settles down like a creamy mass. In some cases I could only compare it to exceedingly fine particles of semola, or some such material, diffused through a pale coffee-coloured fluid. Contains spherical globules not imbedded in a matrix, about an eighteen-hundredth of an inch in diameter, studded with molecules or granules, and showing, when acetic acid is added, a double or triple nucleus. Shaken with liquor potassæ, becomes dense and translucent. Agitated with ether, and the solution gently evaporated, yellow butter-like globules are left.

Mucus.—In normal quantity and condition. Urine slightly flocculent. Deposit easily acted upon by nitric acid, mixes with the urine when shaken. In abnormal quantity and condition, as from severe affection of the bladder or spinal cord, urine may be ropy with alkaline reaction. Deposit coagulable by acetic acid, consists of tenacious matrix with cells, some small and round, others large and flat, with oval nuclei.

In addition to these the urine may contain striated, earthy, flattened corpuscles, possibly from the prostate gland; epithelial cells, casts of uriniferous tubes, and particles of debris apparently thrown off from the posterior part of the urethra and neck of the bladder. These last are very commonly found in spermatorrhœa, especially when it is very severe, and when it has been preceded by gonorrhœa. The specific gravity of the urine in these patients is, with the exception of those persons liable to a very free discharge of it whenever the mind is a good deal occupied, about the average, or perhaps a little higher, from 1·020 to 1·021. I have rarely found bile in it, and scarcely ever blood.

Spermatozoa in the Urine.—Professor Bennett, of Edinburgh, one of the most enthusiastic and earliest advocates of the microscope, used to relate a case in which, finding spermatozoa in the urine, he

recommended the use of chalybeate instead of purgative mineral waters. This he brought forward as an illustration of the value of his favourite instrument in facilitating diagnosis. With all possible deference to Professor Bennett, whose abilities and wonderful industry every one must admire, I would venture to give this as an instance of the facility with which men are led away from the path of clinical study by so-called scientific methods of investigation. A patient voiding spermatozoa would certainly be in such a state of prostration as to call for tonics, without any examination of the urine, and the absence of the diagnostic sign in the next ten cases of spermatorrhœa, which would in all probability have occurred, could only have tended to confuse the judgment of those who were taught to rely on it. Lastly, Dr. Lionel Beale tells us,[36] that the occasional presence of spermatozoa in urine must not be looked upon, in itself, as evidence of that condition to which the name of spermatorrhœa has been applied.

Dr. Golding Bird, a most careful observer, a man who enjoyed excellent opportunities for investigation, which he made use of to the utmost, and who had a large consulting practice in urinary disorders, speaks very guardedly. He says[37] "spermatozoa are by no means *very* unfrequent in urinary deposits, a *few* being *occasionally* found on examining microscopically the inferior portions of the urine of the male adult." He also points out[38] the serious error M. Lallemand has fallen into of mistaking alkaline for spermatic urine; describing it as opaque and thick, as if mixed with gruel, with a fœtid and nauseous odour; characteristics which, as Dr. Bird justly says, are sufficiently common in ammoniacal urine, but certainly by no means so in that containing spermatozoa. Dr. Carpenter says,[39] "In cases of nocturnal emission, the spermatozoa may *not unfrequently* be found actively moving through the urine in the morning."[40] The late Mr. Quekett, too, who was one of the most truthful and painstaking men living, told me that he had repeatedly examined the urine in very bad cases of spermatorrhœa, and that he had rarely met with spermatozoa, and these invariably in small

[36] *Brit. Med. Journal*, 1860, p. 871.

[37] *Urinary Deposits*, fifth edition, p. 374.

[38] *Ibid.*, p. 375.

[39] *Principles of Human Physiology*, p. 823.

[40] Mr. Teevan, at a meeting of the Harveian Society, mentioned two cases in which he had detected spermatozoa in the urine.—*British Medical Journal*, 1868, vol. ii. p. 232.

numbers. I have been singularly unfortunate, for though I employed, as I thought, every precaution, I have often examined several specimens of urine without finding any of these bodies. Dr. Lionel Beale seems[41] to think they occur pretty frequently, and are even met with in the urine of persons not labouring under spermatorrhœa, and Dr. Dicenta seems to have been unusually successful. He detected semen in urine in 19 cases, and after a hard stool in 23, out of 203 patients. But, indeed, his cases seem to have been much more severe than I have usually seen them. He found blood in the emissions in 2 per cent. of them, or rather in 3 cases out of 153, and out of 140 cases, 6 in which the emissions occurred every night, whereas I have only seen this twice in quite 2,000 patients.

Spermatozoa may appear in the urine owing to constipation, when straining at stool may force a few into the urethra, or they may enter this fluid after connexion or masturbation, but under any circumstances they are found in far too small numbers to qualify them for the rank of a pathological indication. Generally, at the utmost some dozen or fifteen can be observed in the field of the microscope, and even these few only got with difficulty from the lowest stratum of urine after it has stood for several hours; whereas when a drop of real semen, mixed with water, is examined the field is seen swarming with them. Mr. McDougall says that an eighth-inch object-glass should be employed for the detection of the spermatozoa, and that a Powell's microscope is better than one by Ross for this purpose. Dr. Lionel Beale however remarks,[42] I think rightly, that a practised eye will easily detect them with a quarter-inch objective.

Dr. Bird says[43] that along with spermatozoa, round granular bodies, rather larger than the body of a spermatozoon are found, and that they appear to be identical with the seminal granules of Wagner. I confess myself quite unable to throw any light upon their nature. I have always taken them for a congeries of epithelium cells. The same author tells us that large crystals of oxalate of lime often occur in spermatic urine, and that his attention was first called to the connexion between the two by Professor Wolff, of Berlin. M. Donné considered the relation of the one to the other so constant, that the presence of the oxalate might be looked upon

[41] *British Medical Journal*, 1860, p. 737. [42] *Ibid.*
[43] *On Urinary Deposits*, p. 376.

as a certain indication of the existence of spermatorrhœa. Dr. Bird rightly combats this idea, and my own experience quite confirms his view, as I have repeatedly observed distinct crystals of the oxalate in men who were not only free from spermatorrhœa, but according to their own statements, had never in their lives suffered from it.

State of the Semen in Disease.—M. Liégeois, who has paid great attention to this subject, has arrived at the following conclusion :—

1. That all men in good health, whether adolescent, adult, or aged, having neither anomalies, vices of conformation, nor any traces of former affections of the organs of generation, have in their semen spermatozoa, the material elements of fecundation.

2. That acute, chronic, or constitutional diseases unconnected with the genital organs, do not seem to exert any influence on the spermatic secretion in the adult by giving rise to azoospermia. In aged persons, on the other hand, this is a frequent consequence.

3. That double gonorrhœal orchitis almost always arrests the secretion of spermatozoa, thus bringing on sterility ; single, it diminishes this secretion. If the orchitis do not come on from gonorrhœa it is not so injurious. Affections of the body of the testis, such as syphilitic orchitis, act very injuriously in inducing sterility. Inflammations in the neighbourhood of the testicle and epididymis do not.

4. That spermatorrhœa, as a rule, does not modify the spermatic secretion.

It seems however pretty well established that even after double orchitis, there is, provided no permanent occlusion or destruction of the tubes has taken place, a gradual return of the presence of the spermatozoa in the seminal secretion. The period of this return seems to be about eight or nine months.

M. Liégeois is right in saying that spermatorrhœa (that is to say emissions) does not as a rule modify the semen ; but in an advanced state of the disease, especially in the case of men who have been guilty of great venereal excesses, this does not hold good, as the fluid sometimes becomes thin, while the spermatozoa are dead, truncated, broken up or even altogether absent ; being either not secreted at all, or else formed in such an imperfect state that they speedily become diffluent.

CHAPTER III.

TREATMENT.

The foregoing account of the history and pathology of spermatorrhœa is necessarily brief and imperfect; but however barren a field this part of our subject may be, that of treatment is still more sterile, and in the course of a long search I have not met with much that showed a determination on the part of the writer to persevere in his observations till he had probed the subject to the bottom. We find many valuable hints as to treatment, but little in the way of an attempt to grasp the subject as a whole. Authors too often seem disposed to rely upon one remedy as a specific to the neglect of all others.

As the divisions of this complaint differ from each other only in their severity, it may facilitate a clear comprehension of what is now to be stated, if the whole subject be considered under one head. In advanced stages of the malady the treatment must simply be more energetic aud unremitting; and with this guide before me, I will now proceed to lay down what appear to me to be the four great rules as to the treatment of spermatorrhœa, which are :—

1. To diagnose very accurately if the emissions are injuring, or likely to injure the health, or not; whether emissions or tendency to impotence form the most prominent feature of the case, and to attack the more urgent of these two.

2. To see if there be any complication, such as dyspepsia, neuralgia, irritable urethra, &c.; which would tend to keep up either emissions or impotence, as until these are remedied there is no lasting improvement.

3. Ever to bear in mind that the great difficulty is to reduce the number of true nocturnal emissions; that the patient can always

master them if he will, and that, if he do not, they will master him.

4. That after youth the disorder has little, if any, tendency to get well of itself, and that therefore no quarter should be shown it. It is like a conflagration, which can only be safely dealt with by thoroughly extinguishing it.

An opinion prevails among medical men that a few emissions in youth do good instead of harm. It is difficult to understand how an unnatural evacuation can do good, except in the case of unnatural congestion. I have, however, convinced myself that the principle is wrong. Lads never really feel better for emissions; they very often feel decidedly worse. Occasionally they may fancy there is a sense of relief, but it is very much the same sort of relief that a drunkard feels from a dram. In early life the stomach may be repeatedly overloaded with impunity, but I suppose few would contend that overloading was therefore good. The fact is that emissions are invariably more or less injurious; not always visibly so in youth, nor susceptible of being assessed as to the damage inflicted by any given number of them, but still contributing, each in its turn, a mite towards the exhaustion and debility which the patient will one day complain of.

I will now assume the surgeon has satisfied himself that the case in hand is one simply of nocturnal emissions occurring to such an extent as to injure the health, and proceed to examine the treatment of this part of the subject. And here I may remark, in contradistinction to those who think that internal treatment is of little service in these cases, that my observations have led me to an opposite conclusion. I have almost invariably found that those patients require a systematic course of medicine, and that, if benefited at all, it has always been by a combination of internal with other means. Further, I can safely say, that by far the greatest number of the patients I have seen required a tonic and sedative treatment, and therefore it may be best, first of ull, to consider, *seriatim*, the principal members of these two groups.

Internal Remedies:—Tonics: (*a.*) *Quinine.*—There can be little doubt in the minds of those who have used it, that this medicine is, in appropriate cases, of great value. It is impossible to say with complete accuracy what cases require tonic remedies of this description, and he who is not able to decide for himself could scarcely be placed in a position to do so by any epitome of

rules and data—experience alone can determine such points. As a general principle, it may suffice to say that when the patient complains of want of appetite and energy, and when the tongue is foul and moist, quinine may generally be given with the best results. Any restlessness, irritability, dyspepsia, or headache, arising from its use, can generally be overcome by the aid of mild aperients, and indeed I think *it is much better to combine them with it, whether such symptoms are present or not.* It is rarely requisite to give it in doses of more than a grain, or a grain and a half, twice or thrice a day. In some cases where the constitution has been tried by a tropical climate, and in very irritable persons, quinine cannot be tolerated at first in doses likely to be at all efficient. Here the tinctures of bark and cinnamon, in drachm doses twice or thrice a day, with ten or fifteen minims of dilute nitric or sulphuric acid, or a similar amount of aromatic sulphuric acid, form an excellent substitute. Like quinine, these medicines are best given just before breakfast and dinner, or breakfast and lunch.[1]

There are some persons who cannot, and some who fancy they cannot, take quinine, and it is quite as difficult to deal with the one as with the other. One patient assured me that as soon as he had swallowed a dose of it, the semen began to ooze through his scrotum! At the same time the sufferings of other patients are anything but imaginary. One strong, healthy man had such severe urticaria developed by it that I at once gave it up;

[1] I venture to offer one or two formulæ :—

℞ Quiniæ sulphatis gr. xij.
(Magnes. sulphatis ʒiv.)
Acidi sulphurici dil. ʒj.
Tinct. cardam. c. ʒvj.
Aquæ cinnam. ad ℥vj. ℿ
Coch. amp. i. bis quotidie sumend.

℞ Pil. rhei compos. ϑj.
divide in pil. vj. i. omni noct. sumend.

℞ Acidi sulph. dil. ʒij.
Syrupi aurantii,
Tinct. cinnam. c. aa ʒiv.
Tinct. cinchonæ comp. ad ℥iij. ℿ
Coch. minim. ij. bis terve quotidie ex aquæ cyatho vinar. sumenda.

Should there be any reason to think that the tincture of cinchona is disagreeing with the stomach, tincture of calumba or chirata may be substituted. The sulphate of magnesia should only be given when requisite, as it does not make the medicine more palatable.

and another, who was very anxious to be cured, being on the point of marriage, said that he was invariably so ill after quinine or any similar medicine, that he would rather face the worst than continue it. Again, I have met with evidence, which I have been forced against my will to admit, that quinine in a few rare cases undoubtedly increases the excitability and emissions. But these anomalies are happily enough very rare, and it would not be hazarding much to say, that forty-nine spermatorrhœa patients out of fifty bear quinine very well.

However experienced a surgeon may be, he can see but a little way into the future, and I can scarcely insist too strongly on the necessity for watching carefully at first over the progress of the case under this or any other treatment. Patients often, indeed generally, fancy that their medical attendant can prescribe something which will at once meet the difficulties of the case, and which may accordingly be continued for an indefinite period. But nothing could be more mistaken than such an idea, especially with respect to quinine. A dose which may be perfectly suited to the emergency to-day will have lost all its power a week hence; complications of the most unexpected nature will spring up, and however simple and straightforward the surgeon may think his directions are, it will only too frequently happen that the patient has misunderstood them. For all these reasons, I consider that at this period of the case too much pains cannot be taken to secure the full effect of the medicine, and this can only be done by seeing the patient at stated intervals, however irksome this may be to both.

(*b.*) *Tincture of the Sesquichloride of Iron.*—In the earliest editions of this work only a very meagre account of the action of this tincture was given; indeed it was not till I had used it for a long time, that I discovered the reason why it failed in so many cases, and was yet so beneficial in others. When properly given, it is one of the safest and best medicines the surgeon can use. But it is no specific; the surgeon enjoys no immunity here from that ceaseless attention and watchfulness which alone insure success, and routine prescribing will, as in other disorders, produce its usual fruits, chance cures and frequent failures on the part of the practitioner, and scepticism on that of the patient as to the real powers of the remedy; for men ever have judged, and in such cases ever will judge, by results alone, and will rather be cured by the most consummate empiric, than hear the most lucid and convincing explanation of the reason why they are

no better. It is for these reasons that I venture to lay down the following rules, which will perhaps enable the reader to carry out the treatment successfully.

1. The first precaution in giving the tincture is to begin by ordering it in moderate doses, as twenty or thirty minims twice a day. If at the expiration of a week no unpleasant symptoms have arisen, the quantity may be gradually increased till the full dose, sixty minims three times a day, or as much as the patient can bear, is attained. Many persons can take a drachm and a half, and even a hundred drops, three times, or as much as eighty drops four times a day.

But if coldness at the stomach, sickness, nausea, or a feeling of distension and griping come on, the dose is as large as we can hope to give for the time being. It is not, however, always necessary on this account to diminish the amount taken; for very often in a few days these symptoms disappear, and so soon as there seems no prospect of their return, the surgeon may again increase the dose of the tincture.

2. When the patient has long suffered from painful digestion with flatulence, and this is immediately aggravated by the smallest doses of the steel, it should at once be given up, and quinine, aromatics, and mild purgatives prescribed, to remove or allay these symptoms. It now and then happens with such patients, that these remedies agree so well at first as to delude them into the belief that the panacea is found, but they really do little more than set the digestion right; unless quinine can be continued, little material progress is made till the steel is resumed. This, if possible, should be done soon. Some few persons, however, never bear the tincture well, and then it is better to give the compound steel pill, or steel mixture, in large doses two or three times a day.

3. Again, some patients suffer principally from weakness with great irritability, sleeplessness, accompanied often by vivid and continuous dreaming when asleep, and despondency when awake, with a coated state of the tongue, constipation and turbid condition of the urine. All these symptoms may occur without any marked disturbance of the digestion, and then the patient wonders why he should lose both flesh and strength; not taking into consideration that man, to live and enjoy health, must not only digest but assimilate his food.

In these cases the best plan is to prescribe a light diet, with two

or three glasses of wine daily, and to give mild tonics and bitters: as, for instance, dilute phosphoric acid, in doses of twenty minims, with an ounce of infusion of chirata or calumba, and a little syrup of orange-peel; or ten-minim doses of dilute sulphuric acid in conjunction with syrup of orange-peel and compound tincture of cinnamon of the London Pharmacopœia. Dilute nitric acid, too, answers very well in some of these cases, and may be given in conjunction with infusion of quassia.

When these symptoms are effectually removed, which is generally not a very difficult matter, the steel may be commenced with, and after this it is rarely necessary to suspend its exhibition; still less is it necessary to give medicine for every symptom the patient complains of; for some of these patients suffer in so many ways that it is hard to say which organ is most out of sorts. The best plan seems to be to disregard all minor considerations and keep only the goal in view. With returning health all these petty troubles will yield, and the patient will wonder how he ever came to be so foolish as to frighten himself in this way, and why he did not try so many obvious remedies before.

At the outset the surgeon often has to struggle with the scepticism of those patients who have previously taken steel and derived no benefit from it, or even suffered from increased dyspepsia after using it. As there is no disguising its taste, and as many of those patients can now read Latin prescriptions as well as we can, the surgeon may as well tell the patient as once, that in all probability he has taken it in too small doses, and without proper precautions; that no good could result from using it, as he has hitherto done, and that he is now to make a trial of its powers on a widely different system.

4. Some persons suffer from constipation when beginning with the tincture; this, however, constitutes no reason for abandoning it. A moderate dose of the aloes and myrrh pill, or a combination of compound colocynth with blue pill and hyoscyamus, or of Spanish soap, aloïn, extract of rhubarb and blue pill, soon proves effectual.[2]

[2] The reader can try the following, or any other he likes better :—

℞ Pil. colocynth. compos. ʒss.
— hydrarg. ϑss.
Extracti hyoscyam. ϑj.
Misce et divide in pil. xij.

℞ Aloïni gr. iv.
Extracti jalapæ,

Sometimes the circumstances of the case call for the addition of remedies which act more upon the colon and rectum, and then scammony, galbanum or podophyllin may be requisite;[3] but so long as the leading indications, to act gently on the bowels and liver and obviate griping, are kept in view, there can be little difficulty in finding appropriate means.

Strange to say, when the patient has taken the tincture for some little time, he often begins to find that his bowels act far more freely than he wishes, and at last makes out that the medicine which constipated him at first now purges him—a fact by which he is rather puzzled. I believe the explanation to be this. A very small dose of steel will constipate as effectually as a large one, but while a small dose of the hydrochloric acid has no appreciable action on the bowels, a larger one purges somewhat freely.

5. One of the most necessary precautions is to see that a tincture of uniform strength and purity is used. Those accustomed to prescribe this medicine very frequently, may perhaps know that a great difference exists between the action of the tinctures usually sold, but I am disposed to think the profession, generally speaking, are not aware of the fact. A short experience will, however, convince any person that such is the case, and that it exerts so great an influence as to account for much of the disparity observed in the effects of this medicine. I have, after trying several tinctures, found none equal to that prepared by Mr. Thomas, of Pall Mall. It is not so acid as those made by other chemists; it does not affect the teeth so unpleasantly; and finally it does not occasion so much griping and flatulence. I do not know to what step in the process of making it this superiority is to be attributed, but I assume that it is due to the greater care with which the acid is removed from the chloride of iron. Possibly the Dublin process, in which evaporation is continued till a great deal of the excess of hydrochloric acid has

Extracti rhei,
Saponis hispan. aa gr. viij.
Olei cinnam. m. i. Misce, fiant pil. vj.

One of either of these pills may be taken two, three, or four times a week.

[3] ℞ Resinæ podophylli gr. ij.
Hyd. subchlorid. gr. iv.
Pil. cambogiæ ℈j.
— assafœtid. comp. ʒss.
Olei cassiæ m. i. ɱ ft. pil. xij.

been carried off, is employed. Finally I may observe of this tincture, that it does not deposit the iron as some tinctures, made by very good chemists, do.

The tincture often sold in shops is of such an irritating quality, that the dose necessary to produce some effect upon the spermatorrhœa will make some patients ill. Of this I have had so many proofs, that I now always caution patients rather to do without the steel than procure it from a source upon which no reliance can be placed. Indeed, the preparation is often sold at such a price, that to realize any profit it must consist almost solely of muriatic acid.

The reader has no doubt noticed, that I speak of the tincture of the sesquichloride and not of the perchloride, but the fact is, that I have, after many trials, completely lost faith in the latter, which I believe to be a mistake and a failure. Its strength is most uncertain, even when made with the greatest care, and when hastily prepared, as is sometimes the case, the iron begins to precipitate almost immediately. It would be far better to trust to the solution of the perchloride (liquor. ferri perchlor. Ph. Brit.).

6. The tincture should be measured in a minim glass, as no reliance can be placed on any other plan. The surgeon may easily convince himself of the necessity for this precaution by dropping a fluid drachm, which he will find is equivalent to a hundred and fifty or sixty drops.

7. Sometimes when toleration of the steel has been quite established, a relapse in the spermatorrhœa may ensue without any apparent cause. The remedy for this is to give three or four injections in the manner to be described afterwards, and then to increase the dose of steel fifteen or twenty minims. And this should be done at once, for, contrary to what might have been expected, improvement has in such cases more frequently followed from raising the dose *per saltum* than from adding only two or three minims at a time.

Thus a gentleman who had long been taking sixty minims of the tincture three times daily, without ever escaping for more than a week from emissions, tried the experiment of taking eighty minims four times a day; the emissions ceased for nineteen days, and from that time he progressed steadily.

Another patient, who was taking forty minims three times daily, raised the dose all at once to a drachm; the nocturnal emissions, which had only, after long perseverance, been reduced to one in ten

days, were almost directly after lessened to half the number: here also the improvement was permanent.

In a third and most obstinate case, the patient, after more than two months' unremitting use of a drachm three times a day, was ordered four injections and a drachm and a half three times a day; at the end of two months he had only had one emission, and no relapse has occurred. Many similar instances have been recorded in my case-book, but perhaps these will be sufficient to fix attention upon this fact; a most important one to remember, for sometimes if this golden opportunity be lost, if the tide be not taken at the turn, the chance may not again present itself. It is most necessary for the surgeon to impress upon the patient's mind, that his best chance of a rapid cure lies in giving the disorder no quarter.

Many surgeons combine steel and quinine in one prescription, but so far as my experiments, and the histories of the cases collected in which those remedies had been tried in a combined form, warrant me in forming an opinion, it would certainly be, that they were used rather from a preconceived idea of the benefits that *were to arise* from their use, than from experience of the good that had arisen in previous instances. The citrate of iron and quinine is occasionally valuable in cases where languor, loss of appetite, pallor, and dyspepsia are combined. Five grains two or three times a day are enough to begin with, but in most cases this dose will soon require to be considerably increased. Dr. Fuller, at the meeting of the Harveian Society already referred to, recommended the hypophosphite of iron in ten-grain doses. I have not had an opportunity of trying it, but as my readers know that Dr. Fuller is an excellent and most careful physician, they will feel assured that it is well worth notice.

(*c.*) *Ergot of Rye*,—First introduced, I believe, for the cure of this complaint by an italian physician, who recommended it to M. Lallemand, seems destined to find its place at last among those unfortunate remedies, which are one year vaunted as specifics and the next year forgotten; now dragged to light by experimental genius and again neglected for years, till they sink to their due level. It once bid fair to become a favourite remedy for gleet; now I doubt if one surgeon in a thousand ever uses it for such a purpose.

Whatever may have been said to the contrary, there is not the slightest reliance to be placed upon the secale cornutum as a specific. When used as an adjuvant to proper treatment it often exercises considerable control over the emissions, and even in some cases of

impotence appears to induce a very marked improvement in the character of the erections. But this is all that can in reason be said of it. I state this advisedly, for not only have I prescribed it in numerous cases without effect, but I have treated many patients to whom it had been given for a long time in both large and small doses, without any change, either for better or worse, taking place.

As an auxiliary means it is, however, well worth while to try it. A drachm is generally as much as the stomach can well bear, and indeed it is perhaps best, with patients of a very irritable temperament, not only to begin with, but to restrict ourselves to, a much smaller quantity. It may be very conveniently administered in the form of Battley's Essence, a minim of which is equal to a grain of the rye, or the liquid extract of the british pharmacopœia may be prescribed; only in this case the surgeon must be particular as to the source the patient procures it from, and even when procured from the best chemists it is inferior to the other; according to Mr. Squire, only half the requisite amount of ether is used in the preparation of it. Battley's preparation is generally so well borne, that at the end of a short time a fluid drachm may be taken at a dose. I have mostly prescribed it to be taken at night, just before going to bed.

All things considered, I think I may say that the cases most likely to be benefited by ergot of rye are those in which steel and quinine have already done some good, where there is little irritability of the system and some tendency to premature emissions and feebleness of the erections, and where local treatment can also be borne. In such cases I always prescribe it, and rarely fail to find it of service; some patients indeed have of their own accord stated that they had derived considerable benefit from this medicine.

Dr. C. L. Mitchell seems[4] to have given the ergot with great success in some severe cases. In one the patient, who never passed three nights consecutively without an emission, and who generally had, when they began, three emissions within the six hours, had become almost entirely incapable of attending to business. He was immediately relieved and ultimately quite cured by the daily use of thirty to sixty grains. In another case the patient, who was also an opium-eater, had become almost imbecile. The emissions were however entirely arrested within seven days from the beginning of

[4] *American Medical Monthly*, April, 1861.

the treatment. In a third, the patient was also suffering from irritable bladder and spasmodic stricture, but ten-grain doses of the ergot and three of camphor, every three hours, relieved him almost immediately.

Sedatives.—(*a.*) *Camphor* is often of great service in checking that form of spermatorrhœa which is apt to ensue in some irritable persons after an attack of gonorrhœa; it is likewise useful in recent and sudden outbreaks of the malady, and even in chronic cases, though occasionally it is not to be relied upon, it is often of great value. A gentleman, a surgeon, who sent his brother to me for this complaint, informed me that the constant use of the camphor alone had worked a complete and lasting cure, although the case was a very bad one. The patient resided in a distant part of Russia, where he could get no medicine except the spirit of camphor, of which he contrived to import two or three large bottles. He took it constantly in large doses for quite three years, and recovered so completely that he ventured to marry, a step of which he had previously entertained the greatest dread. When used, it may be given in doses of half a drachm to a drachm of the spirit. It is very easily taken in half a tumbler of water at bedtime. It is also a very good plan to have it in readiness by the bed-side, so that if the patient should be awakened by an erection and can recover his consciousness sufficiently, he may at once take a dose. He may thus often prolong the period between the emissions, until the organs, no longer exhausted by the drain, recover their normal strength.

As the sedative action of camphor seems to pass off very quickly, while a certain amount of irritative action, which it clearly possesses on the stomach, throat, mouth, &c., is apt to increase to such an extent as to inconvenience the patient, I believe the best way of taking it to be in full doses, once, twice, or even thrice a night when an emission is impending, or when the patient is much pestered with erections; and so soon as ever an emission has occurred to give it up till another one is due, when it may be resumed. Taken in this way, its control over the disorder, though not always certain and often not very marked, is nevertheless in some cases indisputable. There seems to be very little doubt that it acts by securing rest to the parts.

Some persons do not bear camphor very well. It makes them sick, gives them a nasty taste in the mouth, induces sleeplessness instead of quiet, and not unfrequently brings on a certain amount

of headache. In many cases this state of matters soon passes off, especially if the patient be taking tonics at the time, but in others it has compelled me, in the long run, to give the medicine up.

(*b.*) *Lupulin.*—This remedy has been so strongly recommended by Dr. Sigmund, of Vienna, that I was induced to try it very largely. I am disposed to consider it a most agreeable remedy, and when a vegetable tonic and sedative is required it is an excellent adjunct; but he who, seduced by the Austrian professor's description, looks to it as a specific, will most assuredly be disappointed. There is no such thing as a specific for spermatorrhœa; at any rate lupulin is not. I have given it to hundreds of patients in every dose from five grains to a drachm, taking every possible care to secure the best hops, and I have no hesitation in saying, that it cannot be relied on for producing anything beyond a mild and uncertain effect. Dr. Pischeck [5] found lupulin in these cases relieve indigestion and irritation in the urethra.

The surgeon should be careful to use only the lupulinic glands or grains, obtained from the strobules of the hop plant. They are of a reddish golden colour, and granular, whereas the lupulin, or rather lupulite,[6] obtained by treating the aqueous extract of these grains with lime and alcohol, is a yellowish white, uncrystallized powder, and is not to be relied on as a sedative in this affection. The dose of the latter varies from five grains to a scruple, and is best given at bedtime.

Probably from ten grains to a scruple will be as much as is generally required, but I do not hesitate to give from half a drachm to a drachm when necessary. It may be worked up with a little strong spirit into a paste and made into pills. If possible the patient should do this himself. Or the dose may be taken in a little of the Aylesbury compressed milk, or sweetened milk, as first recommended, I believe, by Dr. Bumstead.[7] Like all strong preparations of hop, lupulin sometimes produces headache, but a few days' use of the remedy generally witnesses a termination of this symptom.

(*c.*) *Digitalin* may be ranked with this class of sedatives. It requires, however, to be handled with extreme care, from its well-

[5] *Repert. für Pharm.*, No. I. 1856.

[6] Pereira's *Materia Medica*, first edition, vol. ii. p. 741.

[7] The reader can also try five to ten-grain doses of the non-officinal extract of lupulin, or the Dublin tincture of lupulin in drachm doses. I have had no experience of either.

known power of depressing the action of the heart. Most persons cannot bear more than the fiftieth of a grain at a time, and even this quantity should not be continued long. It may be given dissolved in spirit, or in the form of a pill. It is often of service in those cases of excessive excitement, venereal or purely nervous, which occur occasionally in spermatorrhœa, and used with ordinary care is a perfectly safe remedy, although Mr. Squire, in his excellent "Companion to the British Pharmacopœia," is of opinion that it might with advantage have been omitted altogether from the latter work, the dose being, in practical dispensing, as difficult to weigh as it is to test the purity of the drug itself. Of course the latter must be secured, or it is of no use to prescribe the alkaloid. I give below formulæ for exhibiting it either in solution or pill.[8] M. Lucien Corvisart reported[9] three cases as being greatly benefited by the use of digitalis, though not one of them seems to have been cured. Dr. Lescher employed this drug with good effects in one case, on M. Corvisart's plan, giving the powder in doses of one or two grains gradually increased up to eight grains.[10]

(*d.*) *Opium.*—When, however, we require a sedative, not only to relieve excitement but to soothe pain and aching in the urethra, testicles, &c., opium is the drug to trust to. It is the best tonic for an exhausted frame and irritated mind, and will often bring about a feeling of repose which nothing else can yield; and though it may sometimes produce a slight amount of constipation and head-ache, yet these are trifling ills compared to loss of sleep and nervousness.

It may be given in the form of solid extract or Battley's solution, and to the extent of about a grain for a dose of the former, and ten or fifteen minims of the solution. But I need scarcely say that the dose must vary according to the severity of the symptoms, the susceptibility of the patient to the action of the medicine, and other circumstances of the case. One thing is quite certain, and

[8] ℞ Digitalini grani quartam partem.
Spiritûs rectificat. m. xx. ♏ et adde
Tinct. valerian. ammon. ʒxiv. ss. ♏
ʒj. fluid. bis terve ex aquæ cyatho vin. sumend.
℞ Digitalini gr. ss.
Ext. anthem. ʒij. ♏ fiant pil. xxx.
i. bis terve quotidie sumenda.

[9] *L'Union médicale*, Avril, 1853.

[10] *Bulletin gén. de Thérap.*, 1854, ii. p. 76.

that is, that to be of any service it must produce a speedy and visible control over the symptoms for which it is given.

If the patient really suffer from constipation after using it, a mild aperient will soon remove all cause for complaint. Mr. Hunter sometimes gave opium every night in the fluid form, and cured a bad case with it alone. I have often used it for a considerable time myself, and have certainly a very high opinion of this valuable drug, especially when sleeplessness forms a prominent symptom. It is not often required to check emissions, but when these are accompanied by inability to sleep and excitement it is invaluable. Some patients are afraid to take it lest they should turn opium-eaters, and never be able to do without it again; a fear as chimerical as that a man who took a glass of ale or wine must necessarily turn a drunkard.

I have seen opium in very moderate doses produce disagreeable effects in some persons, as for instance violent urticaria, accompanied by excessive itching and even peeling of the skin of the hands and feet; in others a temporary, but almost total, loss of power to expel the contents of the bladder and rectum. It is also to be remembered that like all drugs which act as astringents, and at the same time subdue pain and excitement, it will almost certainly in time bring on some torpor of the liver.

(*e.*) *Hydrate of Chloral.*—This remedy has not answered well in my hands, bringing on a beating in the head, which one patient compared to a sense of thumping; another to the sound of a great hammer, &c. One patient, who slept very well the first two nights under its influence, told me, that the next two it induced such frightful excitement and inability to remain lying down, that nothing would induce him to try it again. Besides, the hot salt taste of it is very repugnant to some persons, and though it may answer very well as an occasional remedy, especially when the patient is suffering from great pain, as that of toothache or neuralgia, I am disposed to think it most unsuitable for spermatorrhœa, and I should give the preference to a salt of morphia, of which the bi-meconate, introduced by Mr. Squire, is probably one of the best.

(*f.*) *Belladonna* has been recommended in this complaint. M. Trousseau used[11] to give it internally, order it to be rubbed on the perinæum, and use suppositories of it at the same time. He thought

[11] *Rev. Méd. Chir.*, Mars, 1855.

it useful chiefly in those cases where there was spasmodic action. I have had little experience of it, and that little has not been of a very satisfactory nature; dilatation of the pupil, giddiness, feeling of general disorder having followed the prolonged use of even very moderate doses—and it is to be remembered that the use of a sedative in spermatorrhœa must be prolonged. It is not in general relieved by remedies which act speedily and severely, but by those which raise the standard of health, relieve complications, such as pain and sleeplessness, which may be distressing the patient, and the doses of which we can raise when it is thought fit to do so. At the same time I think it only right to say, that my observations with the two last-named remedies have not been extensive enough to warrant me in giving an opinion.

(*g.*) *Bromide of Potassium.*—For some time past I have used this salt as a sedative, and am inclined to think it of service where there is much excitement and sleeplessness. Like all remedies which act in such a way, its use is apt to be followed in some persons by headache, and in others by a feeling of congestion on waking up in the morning, as if they had slept too heavily. To act at all it requires to be given in doses of a scruple to half a drachm; it may be dissolved in camphor mixture, cinnamon water, or even simple water. M. Thielmann and Dr. Pfeiffer are said [12] to have been very successful with it. M. Binet has also recommended it strongly.[13] Dr. Soresina, Dr. Scarenzio, and others have, however, procured their patients such prompt relief with full doses of this salt, that I consider its action well worth examining. Scarenzio mentions [14] a case in which very severe emissions were checked in fifteen days by the use of bromide of potassium, carried to the extent of twelve grammes daily. The cases recorded in the italian journals seem to be principally those in which the disorder was accompanied by very troublesome erections.

We must now turn to a class of medicines of a very different nature, but in their way as valuable as the others, and, indeed, in many cases indispensable. These are remedies which possess, among other qualities, that of setting the secretions right to a certain extent. I remember that in a course of lectures held before the

[12] *Medical Times*, 1858, vol. i. p. 351; 1859, vol. ii. p. 494.
[13] *Presse Belge*, 1858, No. 8.
[14] *Annali di Omodei*, 1863, 185, p. 342; also 183, p. 518.

College of Surgeons, the lecturer informed his hearers that he did not understand what was meant by setting the secretions right, and as no one ever expressed an opinion on the statement, it is possibly doing duty as a principle in surgery. I may therefore as well state that there are certain conditions in which secretions are wrong—*e.g.* when the tongue is very coated or very dry; the urine unduly loaded with deposit, mucus, &c.; when the stools are pale or excessively dark; when they are extremely hard and dry, &c., then I believe the secretions of the tongue and buccal membrane, of the kidneys and bladder, of the liver and intestines, are out of order, and that there are certain medicines which set these conditions right, among which are aperients and diuretics.

APERIENTS.—Every practical surgeon, that is, every one who prefers trusting the evidence of his own senses, and the teachings of such men as Cooper, Brodie, Watson, &c., to abandoning all he has learned, at the bidding of some visionary pledged to put no faith in anything not proved by the blowpipe and balance; or of some sceptical physiologist or pharmaceutist, whose views are so transcendantly philosophic and so irrefutable on paper, that enlightened men ought to look upon the past as useless empiricism, and join in the protest I have often heard made, against believing, that because a medicine suited to the complaint had been followed by a cure, it had any share in producing this result; every such obstinate person, I say, will most likely admit that aperients, properly given, are often of great service in such complaints as spermatorrhœa, and that they should be administered whenever the bowels are torpid and the stools pasty or very dark-coloured. One of the best chances of success in treating disorders of a depressing, wasting kind, is to improve the nutrition of the frame, and this is often effected in a very marked manner by the use of purgatives. How they act it is difficult to say, but the fact is undoubted and is quite familiar to those who have often watched the operation of these remedies. They know well that those patients who have endeavoured to improve a feeble state of health, and rouse a flagging appetite by stimulating and tempting diet, never get better unless plain food is substituted, and the bowels are steadily acted upon until the stools become of a bright yellow.

Many patients fear that the continual use of such medicines must be lowering to the health; but this is a groundless dread, as it is not requisite to use them to such an extent. Others fancy that if

once they begin with purgatives they can never stop again, but must gradually increase the dose as in opium-eating, an apprehension as unfounded as the other. In short, the surgeon may pursue the advice of the old scotch physician to Sir Astley Cooper, "to keep in the fear of the Lord and your boo-els open," with a clear conscience, especially if he take the precaution to give tonics and inculcate a good, but not a rich, diet. There is no need for drastic purgatives; the requisite amount of action is easily obtained by combinations of such substances as extract of rhubarb, blue-pill, jalap, or colocynth, with hyoscyamus or soap, and some essential oil.[15] The hemlock very often not only obviates griping and nausea, but even aids the action of the medicines alluded to. As obstinate constipation is not common in spermatorrhœa, it is seldom requisite to prescribe more than a five-grain pill at bed-time, and it is not necessary to continue that for any great length of time, though in my opinion a moderate use of these remedies is indispensable.

Strychnia.—In the few old-standing cases of constipation which we occasionally encounter, the active principle of nux-vomica is an exceedingly useful remedy, especially when the disorder has attained such a height that mucous discharges occur after stool, or when the fæces can only be dislodged by enemata. It is, however, only necessary in such cases, and they are, as I have already intimated, by no means common; nine times out of ten the confined state of the bowels may be overcome by the use of the aperients mentioned, the tincture of steel, and the old-fashioned remedy of a glass of cold water in the morning, taken fasting.

[15] ℞ Pil. hydrarg.
Ext. jalapæ,
— rhei,
Aloes socotrinæ,
Saponis hispan. aa gr. vj.
Olei cinnam. m. j. ℳ ft. pil. vj.
i. pro re natâ horâ decub. sumend.
In either case to be accompanied by this mixture:—
℞ Magnes. sulph. ʒvj.
Potass. nitratis ʒij.
Tinct. zingib. ʒj.
—— cardam. c. ʒiij.
Aquæ menth. pip. ad ʒvj. ℳ
Coch. amp. ij. omni mane sumenda.

Some patients are as much afraid to take strychnine as they are to begin with opium, but as I have never known it, except twice, even disagree with a patient, I always advise it when its use is likely to do good. It is a perfectly safe remedy when employed in the proper dose—a sixteenth or twentieth of a grain daily[16]—and continued for a short time. I have myself taken it to the extent of a quarter of a grain daily, without suffering any permanent inconvenience.

Diuretics have been used by so many surgeons that it is impossible to omit all notice of them here, especially as mistaken views have been adopted by those who seem to think their advocates viewed them in the light of specifics.

Mr. Curling says "that diuretics, or remedies which excite the action of the kidneys, as the nitrate of potass, are found to act as anaphrodisiacs." This may be quite true of such remedies used in excess, but my observations would lead me to think that it does not hold good in respect to their proper employment. I have not recognized this effect from the nitrate of potass, although I have used it for several years; this, however, may in part be owing to the fact that I have always employed it in very moderate doses. But when an author of so high and well-merited a reputation as Mr. Curling tells us that this is the result of his experience, the surgeon's attention cannot be too carefully directed to the evils likely to arise.

After the statements M. Lallemand has made respecting this salt, I could not well pass over his views. He says that nearly all those who took squill, nitrate of potass, and digitalis, observed a marked exacerbation of the seminal discharges (*une augmentation notable des pertes séminales*), and that the nitrate proved injurious in every instance—an opinion founded upon forty cases, he says, some of which were certainly lamentable enough.[17]

But to what was this due? M. Lallemand has left us perfectly in the dark as to the dose, the most important point of all. In one

[16] ℞ Strychniæ gr. j.
Scammonii,
Alöini aa gr. xij.
Saponis duri gr. xxxij.
Olei cassiæ m. j. ℿ ft. pil. xx.
i. omni noct. sumenda.

[17] Lallemand, vol. iii. pp. 336, 337.

case only can we arrive at any estimate, and here we are briefly informed that an ounce was taken in three days. Now, no one who has seen the irritability of the bladder and kidneys produced by nitrate of potass, or any strong diuretic salt, in gonorrhœa, will be much surprised to learn, that such needless over-dosing brought on a "notable augmentation" of the symptoms in spermatorrhœa. Properly employed, that is to say, in moderate doses, and given in a suitable vehicle, the nitrate is a very useful medicine in those cases where the patient complains of a foul tongue and thirst, with nausea and lassitude; when the urethra is tender and smarts from the passage of the urine; when the urine is turbid and the stomach disordered; when the stools occasion smarting and heat at the anus, as also when he is harassed by a cough, and a good deal of mucus is expectorated; when there is a low, inflamed, or irritated state of the gastro-intestinal tract, marked by dryness of the tongue, heat, and uneasiness in the stomach after food, and on rising in the morning, for these symptoms indicate a disordered state which is often instrumental in keeping up the spermatorrhœa. In all such cases I have repeatedly used the nitrate of potass with success, in doses of five to twenty grains, with compound tincture of camphor or hyoscyamus and a little red syrup; occasionally adding the sulphate of magnesia or potass when an aperient was called for.[18]

Copaiba and Cubebs.—I can say nothing in favour of copaiba and cubebs. The few trials I made were extremely unsatisfactory. Many of the patients who had applied to me had experienced a relapse in the spermatorrhœa from a gonorrhœa, for the cure of which they had taken copaiba, without finding any relief to the emissions, and as I have had ample proof that many cases in which it was pre-

[18] ℞ Potassæ nitratis ʒij.
Tinct. camphoræ comp. ʒiij.
Syrupi rhœad. ʒvj.
Aquæ menth. virid. ad ℥vj. ℿ
Coch. amp. ij. bis quotidie sumend.

℞ Potass. nitratis ʒiss.
——— sulphatis ʒj.
Tinct. hyoscyam. ʒij.
—— cardam. c. ʒiij.
Aquæ menth. p. ad ℥vj. ℿ
Coch. amp. duo bis quotidie sumend.

Four drachms of sulphate of magnesia may be substituted for the sulphate of potass.

scribed after cauterizing the urethra were not in the least influenced by either remedy, I can only conclude that the benefit attributed to it must be assigned to some other part of the treatment.

External Applications :—*Bathing.*—Foremost among these is the daily bathing of the genital organs with cold water. In mild cases, and in cold weather, it is generally sufficient to dash the water over the penis and testicles till they are well braced up, but in more severe forms of the disease further means are often requisite. One very necessary precaution is, I find, rarely taken. Patients bathe, they say, with cold water, but they simply pour it over the scrotum and penis ; just as often as not this process is of no use at all. The patient should use the largest sponge he can get, and squeeze it over *the upper part of the abdomen*, so that the water may flow in quite a torrent over this region, and from thence pour down upon the genital organs. After this the perinæum and rectum should be bathed till they feel quite chilled. The patient will very soon be conscious of a totally different result from this mode of using the application, to that which follows merely splashing a little cold water over the organs.

When the patient can procure them, or where expense is no object, sea water, the solution of Tidman's sea salt or concentrated sea water may generally be substituted with advantage for fresh water of every kind. Patients, however, in whom the scrotum is tender or predisposed to eczema, must always be careful to dry the surface very effectually after using salt water, as however well some persons may bear its application, others less happily constituted may suffer a good deal from irritation thus induced. In hot or very close weather, and especially if the scrotum be very relaxed, the temperature of the water must be materially reduced, otherwise little benefit can be expected from the most prolonged use of it. Where ice can be procured, we have a very simple means at hand. A lump, say half a pound in weight, should be put into about a quart or three pints of water. When it is just dissolved the fluid may be used. Freezing mixtures, such as those produced by the rapid solution of nitrate of potass and hydrochlorate of ammonia, are useful, but as it is rather a costly process to abstract heat from a large quantity of water in this way, the patient should limit the amount of the latter to something like a pint and a half, and purchase the salts at some grocer's or wholesale house, as those which the chemists use are too fine and expensive for such work. The patient

should put at least two to three ounces of each into two quarts of water, stir them briskly with his hand, and then place the water he is going to use, in a very thin vessel, in this solution, and as soon as he can ascertain by the touch that it is cold, bathe with it. If robust and indifferent to the smarting and tenderness it may occasion, I see no objection to his putting the salts direct into the fluid he is going to use for his local bath; but it is not every patient who can stand this. When the back of the head feels hot it should also be sponged, as should the adjoining portion of the spine, or one of Chapman's ice-bags may be applied. Evaporating lotions to both regions suit some patients very well. I give below a formula [19] which I have used in many cases with great benefit.[20]

With regard to the hip-bath I have totally lost all faith in it. I have known patients carry the use of it to such an absurd extent, that I fancy my readers would scarcely credit the accounts I have heard, without gaining any benefit whatever. Indeed I have sometimes wondered that serious consequences had not ensued. The plunge-bath, especially when it can be procured cold, as at the old roman bath near the Strand, when the patient has not to walk too far, either before or after it, and when he feels braced and stronger for the use of it, is an excellent remedy. I need scarcely say that a dip in the sea, particularly in early summer before the great heats have set in, or in autumn when the heat is declining, is preferable to any plunge-bath, but with the same reservations. When languor, coldness, headache, giddiness, a bluish tinge of the complexion, a feeling of not being well, or a sensation of sinking follow, it is likely to do far more harm than good. Swimming should never be prolonged to such an extent as to bring on fatigue, pallor, and chilliness. The reader must remember that it is an exhausting exercise, and that anything like exhaustion will more than counteract the good effects of the bathing.

Sleeping Cool.—However valuable cold bathing may be, and I am by no means disposed to underrate its powers, sleeping with the organs cool possesses still greater control over emissions; indeed I believe *there is a degree of cold at which they never take place.*

[19] ℞ Spir. ætheris ʒvj.
Liq. ammon. acet. ʒiss.
Mist. camph. ad ʒvij. ♏ fiat lotio.

[20] In very severe cases Moriggia uses the hunger cure, and preludes it with very free application of cold to the cerebro-spinal axis and heart.

Whether the patient can and will support it is another thing. I cannot, however, too strongly insist on the necessity for his trying to do so. In my opinion he ought to sleep, winter and summer, with the window open, and the parts as lightly covered as possible. In severe cases I often advise the patient to sleep on the floor. With a view of avoiding cold, he may wrap up the rest of the body, neck, and head, as warmly as he likes. Too great a weight of bed-clothes is particularly injurious, and however strange it may seem, it is quite certain that many persons, who escape tolerably well during the great heats of summer, begin to suffer again so soon as ever thick blankets are laid upon the bed, *although they are not so hot as they were in the summer months.* Again, the class of patients suffering from spermatorrhœa seen at hospitals is almost exclusively composed of artisans who work, and only too often sleep, in warm rooms; while tramps, who are exposed to great inclemency, seldom complain of this disorder.

M. Trousseau recommends hot applications to the perinæum; I had frequently used them prior to seeing his lectures, but I can only give a qualified approbation of what he states. I have found them useful in cases of irritation of the urethra, pain in this part, ardor urinæ, and spasmodic chordee, but not of any value in most cases of relaxation.

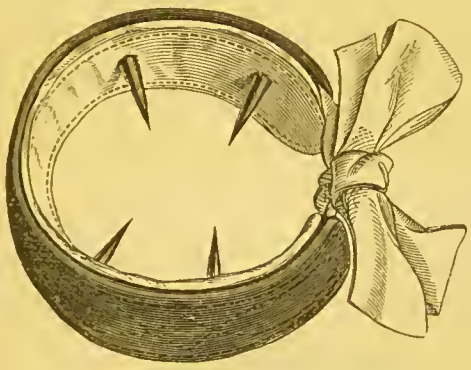
Pressure.—One horrible remedy, very justly condemned by Lallemand, has been revived every three or four years since he published his great treatise. It consists of an expensive instrument which, whatever form it may assume, is constructed for the purpose of applying pressure to the urethra or from the interior of the rectum, in order to prevent the escape of the semen, which of course flows back into the bladder. Some cases of very severe suffering induced by this abominable machine have come under my care, and one patient, in whom spermatorrhœa was exacerbated to such an extent as to bring on impotence, wanted to lay a criminal prosecution at the door of the reckless quack who, he believed, had emasculated him. *A priori* reasoning might lead one to think that such means would occasionally prove of service; I can, however, unhesitatingly say, that a fair trial has convinced me of their uselessness, and I cannot understand how it happens that M. Trousseau recommends this remedy. He, however, does so,[21] and appears to have had a

[21] *Union Médicale*, 1856, No. 85.

certain amount of success with it. The instrument he employs is simply an ovoid wooden pessary, introduced into the rectum, from which it presses on the vesiculæ seminales so as to prevent all escape of their contents.

The Urethral Ring.—This is to my thinking a much safer and better remedy. One kind, "the four-pointed," consists simply of a leather ring armed with points, and so fitted with the points turned inwards on the penis as to produce no uneasiness till erection comes on, when the patient, roused by the pricking, can jump out of bed and thus arrest an impending emission. However sharp these points may be filed they never pierce the skin, as the merest approach to puncture awakens the sleeper.

The engraving represents the ring as it is tied on the penis, the skin of which the points should all but touch. Should they be too sharp the patient can easily file the tips down.



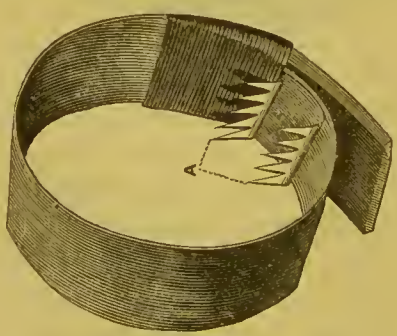
Four-pointed Urethral Ring.

The reader must have seen the effects of this little instrument in order to appreciate its value. It is scarcely overrating the control it exerts over some forms of spermatorrhœa to say that a resolute patient can, with its assistance, almost set the disorder at defiance. The first case I treated with it was one of the worst I ever saw. The patient, a remarkably strong-built man, assured me that for nearly eighteen months he had never passed a night without an emission, and that he was driven nearly mad with them. He looked the very picture of despondency, called nearly every day, though I told him that such a proceeding was far more likely to aggravate the excitement, and generally wrote a long letter after each visit, describing his symptoms, and begging of me to investigate the case. He complained bitterly of an alarming and intolerable feeling in the

back of his head, as if there were a heavy weight inside the skull, and a sense of soreness like that which would have arisen from hitting it with a hammer. Ice to the occiput, mild and brisk aperients, digitalin, &c., were prescribed, but all failed to give any relief. I therefore resolved to try the ring, with the power of which I was then scarcely acquainted. It acted, however, almost like a charm; the emissions yielded with extraordinary rapidity, and at the expiration of quite seven or eight years had never returned. Since then I have employed it in hundreds of cases, and can safely say, that, properly used, it has never disappointed me.

But it must be properly used. There must be no mistake about this. Unless the patient is sufficiently resolute to submit to having his rest broken, any measure of this kind will be inoperative. So soon as ever the pricking awakens him he should rise, untie the tape, bathe the organs with cold water till the erection subsides, and replace the ring. This is not very pleasant work, especially when the weather is cold, or the patient wearied or out of sorts, but it is very efficacious, and that is of a great deal more consequence. If the patient find that he begins to untie the ring in his sleep, he should substitute for the tapes a hook and eye, secured by a small padlock.

Some persons are of such an irritable temperament, so easily fidgeted, to use a common but expressive word, that they cannot bear this instrument. They have a constant tendency to erections



Toothed Urethral Ring.

when in bed, and they complain that the pricking keeps them awake all night through. In these cases the toothed ring shown in the accompanying engraving answers better.[22] It is made of very thin

[22] Both these rings can be had of Messrs. F. Walters & Co., 16, Moorgate-street.

watch-spring covered with silk, and, as the reader will see, is so made, that while the penis is in a quiescent state, the points (A) do not come in contact with the skin; but so soon as a certain degree of erection occurs, it opens the ring out, and the teeth are brought so thoroughly to bear upon the nearest point of the skin, and speedily produce such a pricking, as to warn the patient of his danger.

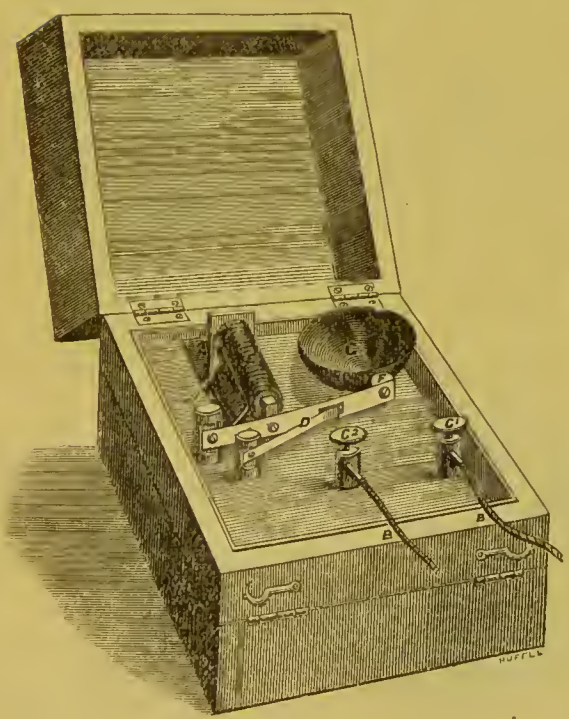
The Cavaliere Giuseppe Tenderini was kind enough to send me a pamphlet[23] printed from a paper read, April 7th, 1871, before the Medico-physical Society of Florence, containing an account of an instrument (the Cintolo Avvisatore), devised for the same purpose, made of leather and fastening with a button, which appears to have succeeded very well in his hands. Professor Ferdinando Zannetti remarked at the meeting that the use of such instruments had long been known; but, as the author observed, and he spoke from trials, these carried out the idea very rudely and imperfectly; they fastened with a clasp like a bracelet; the material of which they were formed was rigid; they gave unnecessary pain and were difficult to loosen, so that patients got alarmed at the prospect of not being able to free themselves from such an incumbrance; objections which the author of the paper seems to have overcome in the ring which he has devised. As the pamphlet is not accompanied by any engravings I am not able to say whether Cavaliere Tenderini's ring is superior to those I have recommended.

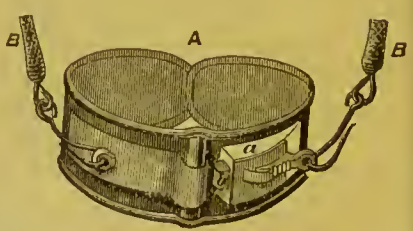
The Electric Alarum.—But the most ingenious instrument of this kind that I have seen is the electrical apparatus figured in the annexed engraving, the invention of the same gentleman (for it is no discovery of mine) who devised the toothed urethral ring, and who had himself been a martyr to spermatorrhœa. The principle of it is that a ring placed on the penis is so made, that when expanded by erection, it completes an electric circuit, and so rings a small alarum bell placed under the sleeper's pillow, which speedily rouses him, however deep his slumbers may be. I own that when the idea was first mentioned to me I felt incredulous. It seemed impracticable that an erection could be made to sound the watchword of alarm; but when the patient explained the working model he had made, I saw at once that it might be made a most potent means of benefit,

[23] *Di un semplice Apparecchio per impedire le Perdite seminali involontarie.* Noto del Dot^r. Gius. Tenderini.

and in this judgment I have not been deceived by the results. I am afraid, however, that the cost (three or four pounds) will always deter the majority of patients from employing it.

The instrument consists of a ring (A), which is hinged for the purpose of keeping the circuit open when the organ is quiescent. Upon the ring is a flat plate of ivory (*a*), furnished with a bolt (*b*), which, upon erection is pushed backwards so as to complete the circuit at this point. With the ring and bolt are connected two insulated wires (B, B), which convey the current to two binding screws (C1, C2). Of these, C1 is in communication with one of two metal slips placed *below* the frame on which the screws rest. C2 communicates with the back spring of the break (D), and thus through the wire surrounding the electro-magnet (E), by means of a second slip of metal, with the other element of the battery. The





battery is, as the reader will infer, placed below the frame, and consists of a small square carbon trough, within which is a square zinc plate lying beneath another carbon plate of the same size. Electricity is disengaged by the agency of sulphate of mercury. From the zinc plate a pin passes through the carbon plate and comes in contact with one of the metal slips mentioned above ; the

other metal slip simply presses on the carbon plate to make contact. On the circuit being completed by the pushing back of the bolt (*b*), the hammer (F), strikes the bell (G). But so soon as this takes place the current is broken at the point (D), and in consequence the hammer recedes. As it does so it re-establishes the circuit, and as a result the hammer is again propelled against the bell. Thus the ringing continues so long as the ring remains on.

The ring can be widened at will by letting out a pin, and the machine is so arranged that the box containing the electric bell can be placed under the pillow of the sleeper. The note, too, given out by the bell may be made very low or loud and shrill, according to the patient's pleasure.

In some persons, in whom an unfortunate tendency to masturbation during sleep is strongly developed by indulgence and irritability of constitution, it is necessary to blister the penis, or employ some mechanical means for preventing a relapse and making it impossible for him to lie either on his face or back. A very simple means of ensuring this is to have two pieces of boxwood, carved with three or four projections sharp enough to cause considerable uneasiness when pressed against the skin, fixed with the projections turned inwards to the inside of the belt of a suspensory bandage, one facing the spine and the other the linea alba. No patient, however sleepy and wearied he may be, can long bear the discomfort occasioned by this implement. For those patients who have, unfortunately for themselves, contracted the baneful habit of masturbation when half-asleep and half-awake, often men who would shrink with horror from the idea when in full possession of their senses, Mr. Walters has, at my suggestion, constructed a light wire cage which the patient can fasten on with a small padlock. As in order to remove it he must rise to get at the key, he has time to become aware of what he is going to do. Blistering the penis with some strong ointment, such as that of the red iodide of mercury, has been recommended in these cases, and I have myself had recourse to it; but it is a clumsy and barbarous method compared to the cage: it makes the patient sore, lame, and uncomfortable in the daytime, and as it cannot be continued for an indefinite period, generally has to be given up before he is effectively weaned from his destructive habits.

Blisters.—In some cases a blister is one of the most useful means of cure we possess. Notwithstanding the strong opinion M. Lalle-

mand has pronounced on the subject, I have no hesitation in asserting, after the numerous trials I have given it, that if some proper medium, as blistering tissue, be used, no strangury, or "*exaspération effrayante*" of spermatorrhœa, however severe the case may be, need ever be feared.

As I have now employed blisters for fourteen years in gleet and spermatorrhœa, I may be allowed to speak somewhat decidedly. The only ill effect I have ever seen from them was occasionally a small number of boils, and this may generally be averted by dressing the blistered surface with cotton-wool, instead of any ointments. Some patients have voluntarily carried the practice of blistering to an extent that would hardly be credited. One gentleman, who had for years been tormented by irritable bladder and gleet, of his own accord blistered the penis and perinæum together upwards of twenty times, with the best results. He had been for nearly a year and a half a perfect martyr to these symptoms. His bladder was so irritable, that often the mere act of stooping sufficed to make it expel part of its contents. He told me that he durst not enter society, or go to any place which he could not leave when he liked. The irritability of the bladder in this case appeared to be simply an extension of this action from the membranous part of the urethra, which at last, under the action of the blistering, threw off a long narrow strip of grey tenacious mucus, quite hard, and looking like a slough. Another, still more resolute, under the direction of a surgeon in Ireland, applied thirty, with the effect of reducing a most obstinate vesicular gleet to a slight and occasional escape of mucus, and I have since accumulated notes of many similar cases.

Perhaps no remedy produces such a deep-seated and gratifying feeling of strength and release from that indefinable sense of constraint and irritation in the organs as a blister. Moreover, if the following directions be literally carried out the inconvenience is made very endurable.

A piece of paper is fitted on the penis, and cut till it exactly covers it from the root to within half an inch of the mouth of the urethra. This is then laid down on the blistering tissue, which is cut out by it, wrapped round the penis with the greasy side next the skin, and fastened with thread or two rings of vulcanized india-rubber cut very thin with scissors. The patient should keep it on till a blister rises, and remain perfectly quiet during the time it is on, lest any motion bring the blister against the scrotum and

vesicate the skin; but he must not apply it on going to bed, as he will most likely fall asleep and not awake until the penis is one mass of vesications,—a state productive of an unnecessary amount of suffering.

In the milder cases, or where the skin is tender, an hour or an hour and a half will be sufficient. The blister is then removed, and if there are any vesicated spots they are punctured and covered with a layer of cotton-wool, bound over these with a small piece of linen kept on by a thread, or the rings spoken of above.

Where a severer case renders a more energetic employment of the remedy necessary, it must be kept on two to four hours until free vesication is produced; a white-bread poultice or two may then be applied, and afterwards, if there be a good deal of smarting, benzoated zinc or white elder ointment spread on linen. It is, however, better to do without ointments if possible. Any patient may make a poultice for this purpose, by putting the inside of a french roll into a slop-basin and pouring a little boiling water over it; the water is drained off at the lapse of two or three minutes, and a little unsalted butter or lard added; an old linen handkerchief will serve to put it in. To protect the penis from friction, a T bandage, with a linen bag sewn into the part which receives the penis, or a handkerchief carried round the waist and dipping in front so as to hold the penis and keep it up against the abdomen, is necessary.

A very good method of blistering the perinæum is to apply Bullin's blistering fluid by means of a camel's-hair pencil.[24] It should be laid on with a rather dry brush, so that none of the fluid trickles down and excoriates the thighs or scrotum, and a space the size of the palm of the hand should be painted over with it. This process soon raises a blister, which is to be dressed like the others, but, of course, only a T bandage can be used. This may be made by attaching a handkerchief to the back of the belt of a suspensory bandage (or another handkerchief tied round the waist), bringing it up between the thighs, and fastening it to the belt in front. A pad, consisting of a pair of socks rolled up, or something of about the same bulk, is then fastened to the part next the blistered surface, and on this is laid the lint with the ointment, which it serves to

[24] Some persons have the skin of the penis so tough that it is necessary to use it for this part also.

retain in its place. The patient, unless of an inventive turn of mind, is apt to fail with his first essay, but he soon learns to dress a blister deftly enough.

DIRECT APPLICATIONS:—*Cauterization of the Urethra.*—The high reputation which M. Lallemand most deservedly gained by his work on spermatorrhœa, and the writings of Mr. Phillips and Mr. Curling, have attached to the "caustic holder" an amount of prestige which, however well merited, has, I think, had the effect of retarding improvement in the treatment of this disease by other means. So far from denying that it is both a safe and valuable remedy, I never hesitate in certain cases to avail myself of it; what I object to is that so many surgeons look to it as *the remedy*, while, in truth, it is not very often called for. It has been engraved, described, and commented upon, till an impression has arisen that it is an unfailing but very formidable remedy; whereas it is *usually* mild, and repeatedly fails in the hands of every surgeon who tries it. Lallemand, Phillips, and Curling candidly admit this fact. "Cauterization," says M. Lallemand, "is most useful in spermatorrhœa from blenorrhagia, venereal or non-venereal, and often useful in atony; it is not of much value is cases of irritation, but even here it may aid by modifying the tissues." Mr. Phillips, in the answers he was kind enough to send some queries I laid before him, says, that "it has not only often failed to effect a cure, but even to relieve spermatorrhœa;" and Mr. Curling in a communication he favoured me with, says, "Cauterization is not an infallible remedy. Some cases are too aggravated, or too well-established, readily to admit of cure by any treatment. Many circumstances tend to counteract the beneficial effects of the caustic; such as want of self-control to check bad habits and the thoughts dwelling on impure subjects; occupations and modes of living detrimental to health," &c. But again he says, "cauterization has rarely failed to give more or less relief."

It might be said that I am prejudiced against cauterizing, and cannot give a fair opinion, as I never use it uncombined, but I have been consulted in quite a sufficient number of cases where the nitrate had been employed by other surgeons without doing any good, to satisfy me that this is a very frequent result. Of course I was not consulted by those who had been cured.

However, many practitioners continue to have great faith in it. Mr. Solly, for instance, who applies it very gently and merely over

the openings of the ejaculatory tubes, says [25] that it will, in conjunction with iron, quinine, and zinc, effect a cure "even in cases where the testicles have shrunk to little more than the thickness of a penny piece and the varicose veins resemble a bag of worms."

Of its safety there can be no doubt when it is properly employed. Lallemand used it for twenty years, and even cauterized the lower part of the bladder, without any untoward result. Mr. Curling says, "In no instance has any harm resulted from the application of the caustic;" and Mr. Phillips, in one of his answers to me, says it has never produced injurious results in his hands, though his experience extends over many hundred cases.

We might suppose that some part of this was owing to the excellent surgery of those who employed it. M. Lallemand did not allow the caustic to remain an instant longer in contact than was absolutely necessary. "I cannot," he says, "protest too strongly against those who give a fixed period (*une durée quelconque*) for the action of the caustic, and measure it off by the watch. *Even to look at the dial takes too long a time;*" and Mr. Curling attributes the absence of severe symptoms, in the cases where he has used it, to his having applied it still more gently. But Mr. Phillips, though he has seen some discomfort caused by it, has rarely heard of any complaint on the patient's part; the pain on passing urine is "very bearable," although he uses the caustic *very freely*. "I have never applied," he says, "too much caustic, but I have more than once failed by using too little." Had any severe symptoms occurred, Mr. Phillips would, we may rest assured, neither have overlooked or suppressed the mention of them. All that is left us is frankly to admit that in his cases no harm resulted from the application of the caustic. M. Lallemand, however, has seen severe retention of the urine, hæmorrhage, and intense pains, which only yielded after a long time; and it seems that stricture has also followed. Dr. Humphry speaks of a good deal of irritation, pain, with frequent bloody micturition, and some discharge following the operation, with perhaps seminal emissions at night. Sir Henry Thompson [26] found that caustic, however carefully used, produced hæmorrhage, retention, or inflammation, unless absolute rest was enforced. Dr. Golding Bird says [27] he has seen most disastrous results from over free application of the nitrate,

[25] *Lancet*, 1858, vol. i. p. 134. [26] *Ibid.*, 1852, vol. i. p. 89.
[27] *On Urinary Deposits*, 1857, p. 379.

and that in one case the operation brought on cystitis and thus placed the patient's life in danger. Mr. Gascoyen has known [28] two persons die from the effects of the *porte caustique.*

My own experience quite confirms all this. However carefully it may be employed, hæmorrhage and excessive pain on making water will sometimes follow. Patients have told me that the agony of attempting to pass water, after this operation had been performed by very experienced surgeons, was so great that they were compelled to desist. In many cases it has been found necessary to give powerful sedatives or inject almond oil along the urethra, before the patient could attempt to empty the bladder. Shiverings, in some cases of such severity as to confine the patient to his bed, have also ensued. Generally, however, this result has only ensued in cold snowy weather. Retention of urine I have not seen after the operation, unless stricture was also present, when I have repeatedly witnessed it, and also relieved it by the simple process of passing a gum-elastic bougie.

On the whole I can only conclude that in many cases it will, if trusted to alone, prove inert when applied so mildly as to cause no pain, and that when used to such an extent as to produce a curative effect, a certain amount of suffering must be looked for. I am well aware that this view is totally opposed not only to the opinions but also to the experience, of many able surgeons; that the treatment by caustic was matured and tested in a most extensive practice for many years; that Lallemand, with unexampled success, lived to see his treatment universally adopted as the great panacea for the disease. Still I cannot help thinking that it is a by-path, and that under the shadow of a great name much has been said that will hardly stand the test of criticism.

Nor is this a judgment formed solely upon my own experience. Several surgeons have told me that they had been consulted by so many patients who had been cauterized in vain, and that they had themselves employed the caustic with so little result, that they had almost given up using it. Now these were not patients who had been handled by bunglers in the art—by men who had employed the caustic unskilfully and rashly; on the contrary, they had been under the care of first-class surgeons in this specialty, both in this country and in France and Germany—even of M. Lallemand himself. Some

[28] *British Medical Journal*, 1872, vol. i. p. 96.

of them, after having bid their surgeons good-bye, the cure being in the opinion of both complete, had endured the mortification of seeing the worst symptoms return.

Beyond all question, some part of this may be attributed to the total want of a systematic course of treatment by medicine; for even granting the value of caustic in most instances, it seems desirable, in order not to lose any part of its effect, first of all to set right, as far as we can, any derangements in the other functions; and this can only be done by carrying out a fixed plan of treatment, from which the surgeon should never deviate when he has once formed his diagnosis. Where this is at fault, it can only be from want of observation at the outset, or from discrepancy in the patient's statements.

Instead of Lallemand's instrument I very often make use of one I had constructed for the purpose. It consists, as shown in the engraving, of a platinum or silver slightly-curved canula (A), and a stilet (B). The instrument, closed, as shown in the drawing of a smaller instrument (C) [29] used when there is stricture of the anterior part of the urethra, is well oiled, and then passed down to the prostatic portion of the urethra, or to any part that is extremely tender, and the stilet being withdrawn, a small flexible bougie, armed by dipping the tip into caustic fused in the ladle (D), is introduced by the canula and drawn lightly over the urethra for an inch or two. It is then drawn back within the canula, so that, in removing it, the anterior part of the urethra is not cauterized. By this means only a very small amount of caustic is applied, every part is touched with which it is necessary that the nitrate should come in contact, while the risk of giving excessive pain, and the disagreeable sensation produced by the rotation of Lallemand's instrument, are avoided. It has also the advantage that the instrument cannot be grasped by an irritable urethra and held till all the caustic is dissolved out, as occurred once to me. A still more unpleasant circumstance happened in the hands of Dr. Humphry. The part carrying the caustic gave way when he was cauterizing a gentleman, leaving the end of the instrument and the caustic in the patient's prostate. Fortunately for the patient the loose piece of instrument

[29] In the engravings the larger instrument is reduced one-half, and the smaller one a fourth. The drawing of the ladle is of the actual size. The instruments can be procured from Messrs. F. Walters & Co., Moorgate Street.

A
B
C
D

was voided with the urine on the following day, and though some unnecessary suffering was occasioned, no ill effects followed.[30]

There is nothing new under the sun! A few years since Mr. Wade exhibited at the Medical Society of London an instrument of the same construction, and three years prior the late Mr. J. Z. Laurence introduced to the same Society a similar instrument. In 1854, a considerable time before either of these events, some months after I had, as I thought, perfected my caustic holder, a friend showed me one on the same principle, which he had had for a considerable time. On looking into Hunter on the Venereal,[31] I found my instrument again, and not long after met with it in an old work on the same subject, written in the early part of last century; in the dim old days, when men treated strictures with the searching candle and oil of lilies!

Injections.—Experience has convinced me that injections are, in most cases, far superior to cauterization. They are milder, safer, and more efficacious. Indeed they are a most valuable remedy; but the cure, when they alone are relied on, is uncertain, and relapses are frequent, whatever may be said to the contrary.

The disposition which has long prevailed of looking on spermatorrhœa as a purely local affection, and the cause of all the weakness, languor, indisposition to rise and attend to either business or relaxation; of the terrible feeling of indifference and recklessness to all going on about the patient; of the prostration and dyspepsia, has given injections an unmerited reputation. There is abundant evidence to show that all these symptoms are simply results of that general disorder which produces these sufferings in common with spermatorrhœa; hence those remedies which restore the general health are equally as necessary as injections. A widely different opinion has long prevailed, for M. Lallemand and his proselytes had very little respect for tonics. But in surgery every decade ought to bring forth a new and better era of treatment, and he who would rest content with Lallemand's doctrines would now be almost as far in the rear as if he treated stricture with bougies of his own making, or gonorrhœa with Sydenham's forty-grain doses of drastic purgatives.

As much depends upon the proper use of injections, I have only

[30] Holmes's *System of Surgery*, vol. iv. p. 605.

[31] *A Treatise on the Venereal Disease*, 1810, Plate III.

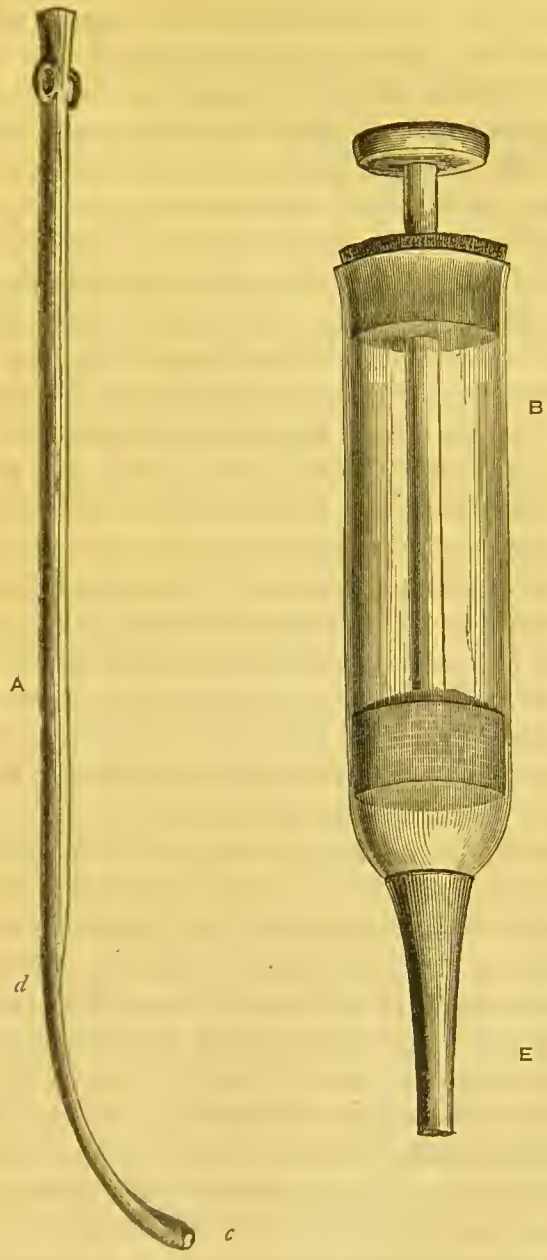
to say, that after making trial of solutions of different salts, I have met with results which justify me in placing most reliance on the nitrate of silver. In my hands it certainly proved superior to any other substance tried; such as chloride of zinc, sulphate of zinc, iodine in solution, &c.

If the patient be a bird of passage, as in the case of a person from the country or about to leave England for some time, it is perhaps best to take advantage of the first opportunity and to give an injection at once of at least ten grains of the nitrate to an ounce of distilled water. But if the surgeon have the patient under his care and can regulate his movements, it is better to give a mild injection at first and afterwards increase the strength as the patient can bear it; it is, however, seldom necessary to go beyond twenty grains to the ounce, although the posterior part of the urethra bears injections much better than the anterior. The great susceptibility of this part of the canal need not excite any apprehension, as the injection, if properly applied, is only momentarily in contact with it.

The form of the syringe is a matter of as much consequence as the choice of the fluid employed. To my thinking, one with a detached tube like that shown in the engraving (A), is much more easily introduced than when the latter is fixed to the nozzle. The opening by which the fluid passes into the urethra should be at the tip (*c*), and the tube should be sufficiently thick from the shoulder (*d*) to the rings to fill up the urethra, and slope from the shoulders to near the tip, in order, as far as is practicable, to imprison any fluid forced forwards. This escape is to some extent prevented by the tip itself bulging out into a pea-like form. The nozzle of the syringe (B) is covered with a silver sheath (E), so that it may easily be fitted tightly into the tube.[32] Ebonite or american "hard rubber" may also be used. Syringes of the ordinary kind, perforated at the sides, or catheters with syringes attached, are not nearly so useful or well adapted for bringing the injection principally in contact with the part of the urethra intended to be acted on. The mode of using it is as follows:—The tube is introduced as far as the membranous part of the urethra, the surgeon grasps the penis, firmly, low down, and then the syringe, charged with two drachms of the solution of the required strength, is adjusted, the piston is

[32] In the engraving the syringe is represented of the right size; the tube is reduced by one-half.

driven home, and the fluid retained till the patient begins to complain of a strong sense of burning and uneasiness, when it is



withdrawn. A piece of thick lint is then fastened over the mouth of the urethra. Should any stains be occasioned by the nitrate, they are speedily removed by rubbing in a solution of bi-cyanide of

mercury, a drachm to half an ounce of water, or by the use of Thomas's cyanogen soap.

Diet.—In all forms of spermatorrhœa the diet ought to be plain but nourishing. The worst cases have always seemed to be benefited by a full meat diet, and it is not uncommon to find that a patient has starved himself to check the disorder and has aggravated it by doing so; indeed, my opinion is that there must be few persons to whom such a plan is suited, as I have not seen one who had reaped any good from the attempt. Some of the most refractory cases I have ever seen were those of men who had tried this method, and had gradually so lowered their diet that though it would support life, and a certain degree of health, it was totally unfitted to maintain it in a condition to resist the inroads of disease. Patients often tell us that they are "extremely careful about their diet," which generally means, when they are young, healthy men, that they are a vast deal too careful. One patient assured me that he restricted himself to six ounces of roast meat and three small slices of bread daily. He literally ate nothing more, he said, and drank only water, never touching butter, milk, tea, sugar, wine, &c. He evidently plumed himself upon his abstemiousness, and seemed perfectly disgusted at hearing it spoken of as little, if any, better than insanity, and being told that a young healthy man, so long as he lived like a rational being and avoided all that was grossly indigestible, might eat and drink anything he liked. Such patients mostly soon appreciate the advantage they derive from giving up these whimsies.

Many years ago I had an opportunity of seeing the effects of a low diet on a large scale. I was studying in the North of Germany, and being struck with the pallid look and indolent movements of a large proportion of the population, I inquired carefully about their food, and could scarcely resist the conclusion that these unfavourable signs were due, in a great measure, to the small amount of meat they used and to its indifferent quality. For the most part it was so hard, lean, and dry that it had to be stewed to rags before it could be eaten. Beef was generally stuffed with little plugs of bacon fat before it was fit for the table. Of this meat, however, few persons consumed as much, on an average, as half a pound a day, many far less. The family with whom I lived consisted of two sons of twelve or fourteen years old, a grown daughter, three grown-up persons, and a servant. They were in very comfortable circumstances, yet I am certain that the entire aggregate of solid meat they ate very frequently did not amount to

more than ten or twelve pounds in a week, frequently scarcely as much. I therefore hardly wondered that they were all pale and inert in the highest degree.

When I told my german friends that there were plenty of Englishmen who could walk forty or fifty miles in a day, or pull at the oar in an open bay for five or six hours both morning and evening, they evidently thought these stories were simply travellers' tales; and certainly their own practice did not belie their views, for I never saw any of them attempt such feats except once, on which occasion two tall, powerful-looking young fellows essayed a walk of rather more than thirty miles on a fine, bracing winter's day; the result of which was that the bigger of the two, during the last mile or so, reeled from exhaustion like a drunken man, and that the other, who I believe but for me would have lain down on the road, was unable to leave the house for two or three days after.

Now I have been told more than once by those who ought to know, that *spermatorrhœa is so excessively common among these young men that scarcely any escape it.* I need scarcely say that I have had no means of verifying this sweeping statement, and therefore cannot tell what amount of credit is to be attached to it.

We can estimate the vast importance of this question when we contrast the well-fed navigator, sailor, and engine-driver, with the wretched farm-labourer, the helot of England; when we compare the yeomen of Cumberland with the starved peasantry of Kent and Wiltshire, or contrast the English boating-man, the prize-fighter, the fox-hunter, with the under-fed artisans of Bethnal-green. In both cases we see, on the one hand an exuberance of rude health and strength, and on the other, men, sprung from the same race, sinking into specimens of the most stupid, helpless, ill-grown, meagre, crippled creatures on God's earth; unable to do a quarter of the work a well-fed navvy can do; prematurely old and crippled, as stunted in mind as in body and an utter disgrace to the country.

But when I say that spermatorrhœa patients generally require a meat diet, I do not mean an excessive amount of meat, or even an undue preponderance of it over other necessary articles of food, such as bread, vegetables, &c.; but such a quantity as will keep the body in sound robust health, which, I should say, ought rarely, if ever, to be less than half a pound and not exceeding a pound. It is perfectly certain that a great many persons eat a vast deal too much of it and without reaping the benefit they expect

from doing so. Such men as navigators, sailors, engine-drivers, labourers at the iron-works, &c., toiling hard in the open air, can naturally enough consume, with impunity, a much larger amount than a man tied to his desk and hardly breathing the fresh air more than once a week. But these men do not always get such an amount as is commonly believed; most of them are liable, from the nature of their occupation and their improvident habits, to find themselves often placed upon very short commons. Perhaps the persons who eat most meat are the men-servants in rich families, and certainly the results of this diet in them are anything but encouraging, as I believe that, with the exception of draymen, few persons stand injuries and surgical operations worse than these men do, and that they rarely live to be old.

The dinner should consist of meat and vegetables with bread. It is a point of great importance that the meat should be as tender as possible; a great mistake is made in cooking it so newly killed that it must be tough. Soda should be added to the water in which vegetables are boiled, and they ought to be always boiled till they are thoroughly softened. The water should then be got rid of by straining and heat till they are quite dry. The neglect of these simple precautions is one of the greatest faults of English cookery and one of the principal causes of indigestion after eating vegetables.

Meat, if not more palatable, is much more digestible when simply roasted or boiled than made up into stews, fricandeaux, &c., which do not agree with dyspeptic patients, and indeed, seldom fail to produce a very uncomfortable sense of distension, especially when malt liquor is taken at the same time; unpleasant eructations are also exceedingly apt to follow indulgence in the use of this dilute, seasoned food.

As to the choice of meat, I believe that is a matter of very little importance so long as a grossly indigestible diet, such as one containing too much pork *et similia*, is avoided. I think there should be plenty ot variety, and that whimsies of all sorts should be avoided. One patient expressed his surprise that he should be getting steadily weaker, as he lived with great regularity, he said, and on the best of meat. I found, however, that his idea of this consisted in eating four large mutton chops daily,[33] one with each meal, and that he never

[33] I am almost sure it was Sir Astley Cooper who asked a patient what he

departed from this rule. Another carried his mania for having his meat underdone to such an excess, that he actually on one occasion, having invited some friends to supper, put before them not an underdone but a raw shoulder of mutton!

Although a good diet is useful in this complaint, it is, at the same time, indispensable that the patient should abstain from rich or concentrated meats. I may seem paradoxical in condemning the most nourishing, as it is thought, of all food, namely, jellies, &c.; but nourishment is that which is digested and assimilated. Jellies, essences of meat, and articles containing too much fat, or which are too heavy and tough, overtax the powers of digestion, and still more those of assimilation. After living on them for a very little time, the tongue becomes coated and tremulous, and the breath foul; constipation, thirst, and turbid state of the urine set in, accompanied by a dry and scurfy state of the skin, and wasting; in short, the patient is bringing on an attack of scurvy. The same sort of thing often happens from mixing really good things in an improper manner; such as the addition of a chop and a pint of milk to breakfast, of stout to port wine, of meat to tea and supper. Good living aids nutrition; these things, except in the case of some special exhaustion, manifestly impair it, and are therefore unsuitable.

Late hours for dining are either injurious or not beneficial. No patient suffering from spermatorrhœa should dine later than half-past five, and, if he can manage it, three or four o'clock is still better. Heavy suppers are worst of all; they are positively suicidal. I have not the same faith in diet, especially in the minutiæ of diet, as many writers, but I have so often traced relapses or obstinacy of the complaint to this cause, that I speak rather confidently.

Good bread is one of the most important items of diet, as wheat contains within itself the three nitrogenized constituents of animal food—albumen, fibrine, and caseine. Now a great deal of the bread sold, not only in London but in the country, owing to the rejection of the bran in some cases, to the inferior quality of the wheat used in others, and to a conjunction of these two causes in a third set of

would take for breakfast, to which the prompt reply was—"Three mutton chops without fat and well peppered." The anecdote, if my memory be true, is in Bransby Cooper's admirable life of the great surgeon.

cases, contains little more nourishment than would be derived from the same quantity of straw ground up, and even the whitest and finest bread is totally deficient in cerealin and phosphates. Nor does the best-made country bread contain these to such an extent as it ought, as a large proportion of the bran, in which they are found, is used for other purposes. For some time past, therefore, I have been in the habit of recommending patients to use the flour prepared according to Chapman's patent by Messrs. Orlando Jones & Co.; as one pound of bread made from this flour contains quite as much nourishment as a pound and three-quarters of ordinary bread, besides ingredients which are not to be found generally in any other bread wherever it may be made.

Another point of great importance is a proper choice as to quantity and quality of what the patient drinks. As a rule, malt liquors all act injuriously in these cases. Pale ale is one of the worst. An impression has got abroad that it possesses some tonic power, and patients sometimes express their surprise, that they should be getting constantly and steadily weaker while taking two or three pints daily of such a powerful restorative. But whatever strengthening properties it may possess, I have never been able to detect them, while its deleterious qualities in bringing on giddiness, excessive discharge of phosphates, great languor, &c., will soon be apparent enough to any one who studies its action on spermatorrhœa patients. Stout is sometimes useful for a few days when there is great exhaustion, as from any severe, sudden illness, or from great pain, or from an injury.

I do not deny that beer may be taken with impunity by men using violent exercise, as for instance glass-blowers, iron-workers, reapers, mowers, &c., who perspire enormously, and who most likely could only bear stimulants in a very dilute form. Neither do I deny that some men who take it habitually enjoy very good health. These points have nothing to do with the question, which is, whether or not beer agrees with persons suffering from spermatorrhœa.

Red wine, especially claret, seems to answer best in these cases. I have repeatedly heard from patients that, even when using the same medicines as previously, they had noticed a very decided diminution in the emissions after taking to claret. In some rare instances this decline has amounted to quite one-third or even one-half of the number. In very cold weather a little port or Tarragona wine may be added to the claret. As to the quantity, I believe it is

useless to expect any medicinal action from less than a bottle a day. The quality is a matter of very little moment, so long as the wine is pure and not too sour. Sound vin ordinaire at a shilling, or gauphine at tenpence, a bottle is as useful, medically speaking, as the finest Lafite. Carlowitz is an excellent wine for this purpose. It has more body than claret and is less exciting than burgundy. And here I may remark that I am not judging in any way from reports on wines in medical journals, the scientific analysis of chemists, or the severely impartial detail of facts in the pamphlets drawn up by wine-merchants. I have not the least doubt that both these medical and chemical reports are most ably and conscientiously made, but I have also not the least doubt that the wine sold to patients is of a very different product from that which elicited such praise on the first mention of it. Scores of statements made by patients, and numerous trials with wines procured, unknown to the particular wine-merchant, have satisfied me on this head. In speaking of the value of carlowitz I am guided by the most careful study of the progress of cases under its influence, by the statement of the patients as to how they felt while taking it, and a fair comparison of these observations of these results with those obtained from examinations of patients taking port, sherry, claret, &c.

Spirits should as a rule be put under interdict, especially when taken hot. Rum and gin are the worst of all. Whisky, when it can be had pure and old, which is not often the case, is one of the least objectionable. Cognac seems to agree with some persons. My attention was first called to it by a patient who told me that, whenever he drank a glass of cognac and water before going to bed he never had an emission. I have since followed up the observation, and am disposed to assign a certain amount of value to it. There are evidently persons who are benefited by brandy, while it rarely if ever does harm; therefore if a patient must take spirit it is perhaps the best. The excessively high price, however, to which pure cognac has now risen, renders it almost unattainable for a great number of men. Rum mixed with milk is a valuable remedy when there is a good deal of exhaustion, as from neuralgia, for which it is the best remedy I am acquainted with, and often in impending impotence; but I have not found it agree so well with those suffering principally from emissions.

The breakfast is as important a meal as the dinner. So far as regards the choice between tea and coffee, ham and eggs, mutton

chops, cold roast meat and fish, &c., the patient may, once for all, decide as fancy or experience suggests.

I have heard a good deal urged against tea and coffee, especially when taken at night, and it is pretty certain that in some few persons they induce sleeplessness and dyspepsia. In such cases, of course, they are better omitted; but when they agree, they may be used without any fear of injury to the nervous system or stomach, and I have been astonished to learn from patients that medical men have told them there was a possibility of mischief occurring from their use. I believe the opinion, however, to be utterly unwarranted, and that tea and coffee are among the most precious gifts of Heaven.

I have been surprised to find how prevalent the use of cocoa, milk, and beer for breakfast is among these patients. As to the former, which many have vaunted to me as almost a specific against indigestion, I should feel inclined to act on a saying ascribed to the late Earl of Derby, and prefer the dyspepsia, but when patients like it there can be no particular objection to its use; it is, however, entirely wanting in the fine diffusible stimulant which resides in tea and coffee.[34] Milk alone is a most unsuitable thing, especially for persons advanced in life and of sedentary habits, unless eaten with such substances as porridge. With respect to the use of beer, it might serve very well for those who are always ready to set up a cry about the superior diet and wisdom of our ancestors; it might suit the harmless lunatics who would, if they could, get up our young ladies on the model of Jane Grey, or Elizabeth Tudor, who

> "Her breakfast would make
> Off a tankard of ale and a pound of beefsteak,"

it might have been fitly patronized by an enthusiastic Tory forty or fifty years ago, who followed in the wake of the then famous Morgan O'Doherty,[35] and made it a question of principle, almost of religion, to despise such weak nervous stuff as tea and coffee, because our ancestors drank only good beer. But the time for these mistakes is pretty well over. Our ancestors were neither so healthy nor so strong and cleanly as the present race, and the very indifferent beer

[34] For most valuable and original information on this subject the reader may consult Johnson's *Chemistry of Common Life*.

[35] A well-known contributor to *Blackwood's Magazine*, when it was the most brilliant journal that ever existed. *Fuit Ilium.*

and other potions which they drank out of filthy black jacks, leather bottles, and tygs (for their most renowned drinks from the times of mead and metheglin, down to those of "orange and lemon and Lambeth ales," were very poor stuff compared with the stout, cooper and pale ale of our best brewers) could only have served to muddle their brains. In that respect, at any rate, the "tymes of fadres old" have changed for the better.

Yet I have known men so far carried away by their admiration of old institutions as to fancy that they could not keep up their strength without breakfasting on beer and cold meat, though I never knew one who improved his health by the practice. One patient who persisted in breakfasting thus and doing the same thing at tea-time, drinking quite a gallon a day of weak malt liquor, began at the end of about twenty months to show signs of considerable irritation of the kidneys, under which he speedily sank. After death, a largish calculus was found in the pelvis of the left kidney, which had destroyed a considerable portion of the organ. This patient had enjoyed very fair health up to the time of his perpetrating this freak. Another, a tall, powerful young fellow, a famous athlete, was kept to the house for months by lumbar pains, phosphates in the urine, &c., apparently from the very same thing.

Smoking.—So far as regards smoking, there is really no more objection to it than there is to the use of a glass of grog at night. The only danger is in the abuse, and that, in the case of an attack of depression of spirits, the patient may sit at home smoking and brooding over his imaginary calamities, instead of going into society; one of the best preventives against the hypochondriacal, misanthropical feeling of which so many persons complain.

The efforts of Mr. Solly, Sir Benjamin Brodie, Mr. Lizars and others, to represent smoking as the most deleterious practice possible, the cause of national degeneracy and physical decay in our male population, of the prevalence of dyspepsia, nervousness, exhaustion, and shortness of life, however well meant, were, to say the least, extremely injudicious; for their statements teemed with assertions which the simplest observation showed to be unfounded, and therefore not at all likely to convince any but the most unreasoning of the lay population. They maintained that the average height of men had declined in this country, while the size of the old suits of armour shows that this is not the case; and when seeking to attribute the prevalence of nervous disorders and those of

the stomach to smoking, they forgot that these complaints are common among women. Mr. Lizars wanted people to believe that smoking was fatal to ability and energy of character, whereas a list of the most able and energetic men of the last two centuries shows a large proportion of smokers. Again, Mr. Solly asserted that smoking interfered with longevity, but examples enough were brought forward to show that smokers often attain extreme old age ; among many others were quoted that of Newton, who was a great smoker, and lived to be eighty-four, and of the famous Hobbes, who used to smoke thirteen "churchwarden" pipes every night, and who died at the age of ninety-one. He quoted, as a specimen of the infatuation induced by smoking, the case of a man who spent £300 a year in cigars, forgetting that at such an extravagant price as sixpence or eightpence for each cigar, he must have smoked from sixteen to twenty-two hours a day, *without the least intermission*, every day of the year. Sir Benjamin Brodie said that the mischief occasioned by smoking was caused by the empyreumatic oil of tobacco circulating through the blood, forgetting that it was first of all necessary to demonstrate such an extraordinary anomaly as that of an oil being taken up into the blood at all. Yet these strange statements passed for the most part uncontradicted. One journal even spoke of Mr. Lizars's pamphlet as "admirable," whereas I suppose it is one of the worst books ever written ; bizarre and confusing in the arrangement, illogical in the reasoning, full of gross exaggerations, and abounding in bad taste and bad grammar.[36]

Gymnastics.—Few means of controlling spermatorrhœa could be devised so simple and natural as exercise, especially gymnastics, which the common experience of mankind has extolled from the most distant times. Hence we find that every writer who has attentively watched this disease has strenuously insisted on the necessity for gymnastic exercise. But owing to the late hours kept up in many London houses, it is often impossible to resort to this remedy. It is useless to talk of the advantages of boating, cricketing, &c., to young men pent up in shops and warehouses till eight o'clock at night. Thus, like the baths, douches, mattresses, &c., which are

[36] I quote one sentence, which is scarcely worse than the rest of this "admirable pamphlet." The parts in brackets and the notes of admiration are mine. "Query —If the ulceration (he does not say what ulceration) differs from carcinoma, a smoker runs (query, does a smoker run?) the risk of two diseases, viz. carcinomatous surcoma (!) and carcinomatous nicotianum" ! !

recommended, they are liable to one grave objection, that of being inapplicable in perhaps nine cases out of ten.

Accordingly, the surgeon will often have to reckon upon his not being able to procure anything beyond a Saturday afternoon's relaxation and a little morning exercise. Still, even restricted in this way, the patient can do a good deal. If he be really determined to save himself from the results of his own indiscretion, he may materially aid his medical attendant by rising at six or seven o'clock, sponging with cold salt water, using the dumb-bells for half an hour, and following this up with a brisk walk. It will not be long before his muscles grow firmer and his skin clearer, before he sleeps sounder and feels more comfortable under this system; and of exercise it may truly be said that rich and poor, young and old, must alike cultivate it, or pay nature's penalty for neglecting to do so.[37]

The society of a friend will render his walks more beneficial and less irksome, for, beyond doubt, much of the advantage from active exercises arises from the healthy spur given to the mind by the emulation induced; by the natural pleasure man feels in society, and the forced diversion from gloomy thoughts and forebodings. To some men rising early is the severest penalty that can be imposed; but resolution soon brings its own recompense, not only in the improvement of the health but in the positive enjoyment derived from the sweet freshness of the morning—the brief childhood of the day—the most precious, most neglected hours of our daily cycle. Even London air is then pure, and under such influences the mind grows healthier and steadier, and the energy of the system revives.

But walking day by day; moodily dragging through the prescribed number of miles over the monotonous highway, the crowded street, or the dusty park, will do no good in spermatorrhœa; it will not cure despondency; it is no antidote to the bashfulness so many of these patients complain of, often a greater torment by the confusion and loss of presence of mind it occasions than any bodily suffering. And in every form of exercise it is necessary to stop short of anything like over fatigue. It is not uncommon for patients to remark that a long walk is followed by an emission, or even a succession of them.

I am constantly asked what is the best kind of out-door exercise

[37] "Æque pauperibus prodest, locupletibus æque;
Æque neglectum, pueris senibusque nocebit."

for those who can procure it. I believe any kind will do equally well so long as the following conditions are carried out. 1. That from its nature or immediate effects the patient can be induced to take an interest in it. 2. That there should be sufficient emulation excited by it to make it rather a passion than otherwise. 3. That it should not be carried to such an extent as to induce any exhaustion. 4. That it should not be of too expensive a nature; and 5. That the patient should not have to go too far to reach it. Taken all in all perhaps few recreations offer so many advantages combined as volunteering, which may be pursued nearly all the year round, and in all kinds of weather. There is plenty of room for emulation in it, and as in some of the regiments gymnastic sports are now cultivated, unusual opportunities for indulging in them are thus afforded. Riding is an admirable exercise when the organs are not too excitable, but I need scarcely say that it is a vast deal too expensive for many young men. Cricket, I confess, I am rather afraid of in many of these cases, as I have so very often found that patients have had an emission after a fatiguing day at it, and the same may be said of boating. Indeed patients often find that they have to give up both, because they cannot pursue them in moderation, and unless they do this they cannot get rid of spermatorrhœa. A famous Thames oarsman was under my care for this affection in a severe form, and expressed the greatest incredulity when I told him, that, after maturely weighing all the circumstances of the case, I had come to the decision that his rowing feats were the principal cause of the disorder persisting so obstinately. But when once his attention had been called to the connexion between the two, he speedily came over to my view, and then, of course, rushed into the opposite extreme, giving up boating altogether, as he said there was no middle course for him.

Every kind of violent exercise or exertion should be avoided. Lifting heavy weights is one of the most foolish things possible. I have seen instances enough of its injurious action. In the first case that ever came under my care, the patient, at the end of seven months, was still suffering from excessive discharge of mucus in the urine and emissions. Dr. Bird mentions a case where a student at Guy's, having strained his back by lifting a sack of Epsom salts, fell into a state of marasmus and gradually sank.

Moral Means.—Some writers have laid great stress on the necessity for securing the mind from all impure ideas, and especially from

reading all works on the subject; indeed from the tone adopted by several it would appear that this is the only remedy called for. Beyond all doubt both precepts are excellent, and ought to be enforced by every means in the surgeon's power, but no one practically acquainted with the disease would dream of relying upon them alone. It would be just as rational to lecture a patient with delirium tremens or impending mania upon his folly, or to ask a man suffering from the pangs of neuralgia or toothache to wean his mind from the subject. In the more severe forms of the disease some physical improvement must precede any steps of the kind.

Nor have I any more faith in the close mental application recommended by Dr. Carpenter. On the contrary, I have every reason to believe, that when it exerts any effect at all, it is in many cases injurious. Nor is this merely an individual conviction. Students, especially those preparing for examination, have over and over again, when once their attention was directed to the fact, found emissions return so regularly every time they began to study hard, that they have come to the conviction of its being useless to try and do much in the way of cure till the examinations were off their minds. But this is not the only objection to the plan. In a great number of bad cases I believe it is useless to inculcate study; the depression and irritation are too great to allow the attempt to succeed; and with all the good-will possible, most of these patients cannot make a beginning till they have gone through a course of tonics and purgatives. I therefore advise those who have time to spare, to begin study by reading *aloud* for an hour every night, and then to go out as much as they can into society—a plan from which I have seen better results than from attempting to impose upon an exhausted brain a task it cannot possibly execute.

Men of great self-control and determination, who have put in force all moral means at their command, and who have sedulously cultivated athletic exercises, have at last been driven to lay their case before a surgeon; after discovering, but too late, that all their efforts only served to arrest, not to cure the disease. The class of persons, too, most liable to it, shows how little mere moral means avail to effect a cure. Barristers, medical men, authors, tutors, clergymen, are, as they know only too well, compelled to try the effects of close mental application—yet these are the very classes that yield the largest proportion of spermatorrhœa patients. Even so beneficial a means as early rising would, if trusted to alone,

disappoint us. Still I hold healthy occupation of the mind, when it can be combined with due exercise of the body, to be an excellent means of keeping up the patient's spirits, of inducing him to persevere in his efforts under the most adverse circumstances and the greatest discouragement, and of substituting a pleasure which never wearies for frivolous or vicious amusements. I therefore always recommend patients to take up a hobby of some kind or other. Whether it be botany or insect-hunting, geology or archæology, fishing or sketching, matters little so long as it gives him plenty to think about; a pursuit of this kind will always be of service, and never can do any harm. Unfortunately only too many persons cannot be persuaded to make a beginning.

Connexion.—The vexed question of connexion is one which may be decided out of hand. *It has no power of curing bad spermatorrhœa;* it may cause a diminution in the number of emissions, but this is only a delusion; the semen is still thrown off; the frame still continues to be exhausted; the urethra, ejaculatory ducts, and testicles are still harassed by the incessant tax, and the patient is all the while laying the foundation of impotence. That the disposition to emissions is not in any way cured by marriage under such circumstances is, I submit, conclusively shown by the fact that they repeatedly begin again if continence have to be enforced, owing to absence or other causes. This statement may appear overcharged, but I have every reason to believe it strictly correct. What is more, I have the best grounds for inferring, that bad symptoms in married men are very often due to connexion when the frame is really not strong enough to bear it. Many surgeons seem to think that the advice of Thetis to her swift-footed son[38] is the grand secret of cure, but experience has convinced me that marriage should follow, not precede, a cure, unless the patient will consent to be treated after marriage. When this can be done, even a very considerable degree of spermatorrhœa need not interfere with his marrying, as well-regulated connexion is, *under the surgeon's care,* often a most valuable aid to treatment. There is one very simple rule as to how often a patient ought to have connexion, and that is, to permit it only when the appetite for it becomes irrepressible in spite of all resolution to the contrary. According to the statement of an anonymous author, which Dr. Carpenter "believes to be

[38] "ἀγαθὸν δὲ γυναικί περ ἐν φιλότητι
Μίσγεσθ'."

strictly correct," it would appear that excesses in this respect are only committed by unmarried men. The idea is very praiseworthy, but the doctrine is essentially unsound.

Treatment of the Complications of Spermatorrhœa. — Irritable Bladder.—Nitric or nitro-muriatic acid may be given when there is much irritability of the bladder or scalding. If the patient complain of spasmodic pain at the neck of the bladder, and we find the urine loaded with lithates or clouded with mucus, these acids, along with laudanum, may be exhibited in decoction of pareira brava or chimaphila.[39] The pale urine so often complained of by men accustomed to great mental toil, is a symptom which has not received the attention it merits. It is by no means uncommon with persons so situated. Barristers have often told me that they suffered from a copious discharge of pale urine soon after sitting down to master a brief. Some men are attacked directly they begin to play chess. A patient, who was very fond of algebra, assured me that so soon as he got absorbed in a difficult problem he was obliged to rise and empty his bladder. A strong tendency to sleeplessness often accompanies this.

In such patients the skin sometimes acts very feebly till they take exercise, there being almost no perspiration and little transpiration. Very slight exertion, however, will bring on profuse sweating. To a certain extent they are accordingly benefited by friction of the skin, as with a hair belt and gloves, and a moderate use of vapour and hot baths. In general, when this irritability of the bladder is the only symptom complained of, it does not require any very great attention, but when it co-exists with spermatorrhœa, or a strong

[39] ℞ Acidi nitric. dil. ʒiss.
Tinct. aurant. ʒiij.
Syrupi flor. aurant. ʒiv.
Mist. gentian. comp. ad ʒvj. ℳ
Coch. ampl. duo bis quotidie sumenda.

℞ Acidi nitric. hydrochlor. dil. ʒiss.
Liq. opii sedativi (Battley) m. xl.
Extracti pareir. brav. Ph. Lond. ʒj.
Decoct. pareir. brav. ad ʒvj. ℳ
Coch. ampl. duo bis quotidie sumenda.

Or ℞ Acidi nitro-hydrochlor. dil. ʒiss.
Liquoris opii sed. (Battley) ʒj.
Decocti chimaphilæ ad ʒviij.
Capiat coch. amp. ij. bis terve quotidie.

tendency to this disorder, I would decidedly advise, that in addition to the usual treatment by tonics, the food, and especially what is taken to drink, should be given in the form of a diffusible stimulant. Thus, for instance, let the patient, so soon as he finds an attack of this kind coming on, take a glass of wine, claret if possible, or madeira (but not malt liquor of any kind), or a cup of good coffee or a basin of hot soup. If it continue to recur, let him try the french style of living—a cup of tea or a basin of light soup on rising; at half-past ten a good substantial breakfast, a thorough *déjeûner à la fourchette*, with half a bottle of claret; at half-past five or six a *light* dinner, not the loathsome monotony of what by an abuse of language is called english fare (Heaven save the mark!) cannibal-like, huge, half-raw joints and vegetables; but something that will refresh the frame instead of throwing it into a lethargy. After dinner a small cup of mocha coffee or of tea, followed at bed-time by a good glass of grog or whisky toddy.

It is almost superfluous to say, that all complications require immediate removal. Gonorrhœa, gleet and stricture, have their appropriate remedies, which I must now proceed to discuss. It has, however been asserted that spermatorrhœa may depend upon fissures in the anus, ascarides,[40] &c. To which I reply, that I have strong doubts about the fact, and I am very glad to find that Mr. Curling opposes this view; but as these causes would require removing for their own sake, it is obvious that the treatment must be much the same. In one case in which the emissions were almost epileptiform, ascarides were present; but the seminal emissions subsided rapidly without any proof that the ascarides were removed. In another instance, where they had so obstinately resisted all vermifuge remedies, that one very experienced surgeon told his patient, that if he were to take out the mucous membrane and scrape away every vestige of the parasites, they would still return, the emissions were cured in the end without any evident abatement of the other nuisance.

In all the cases I have seen complicated with the round worm, masturbation had also been practised to such an extent as alone would have proved adequate to bring on emissions. These cases, I must admit, all proved very intractable, and it would appear that unless the complete destruction of these parasites be effected, little

[40] Dicenta gives ascarides among the causes.

can be done for the emissions. The use of the steel, however, so generally proves adequate to their removal, that it is not necessary to try anthelmintics till it has failed.

Circumcision.—Whenever there is an accumulation of sebaceous matter under the prepuce, it should be got rid of as quickly as possible with soap and water, aided by the subsequent use of an astringent lotion of zinc or sulphate of copper.

I must here demur to M. Lallemand's plan of excising the prepuce in every case where accumulations of sebaceous matter behind it coincide with spermatorrhœa. Where there is also a *contraction* of the prepuce, so that the glans cannot be uncovered without pain; where a firm, constricting ring has formed underneath the mucous membrane, or where the emissions resist a fair use of tonics, and seem to be kept up solely by the extreme length of the prepuce, I grant that the remedy is circumcision, or at any rate division of the constricting ring; but where the prepuce passes freely over the glans, plenty of soap and water every morning, and the use of a lotion, such as one of those mentioned above, will almost always give relief.

When circumcision is imperatively called for, I have found it best to slit up the skin and mucous membrane to the reflection of the latter, and then to cut away the frænum as far as I could. The constricted part, which is mostly near the edge, is removed in a circle with a pair of sharp scissors, and the bleeding being stopped, the skin and mucous membrane are brought together by several fine stitches, and the intervening spaces may be covered with collodion. Of all the operations I have seen this leaves the neatest prepuce.[41]

When the patient's consent to a twofold operation can be obtained, and when he is very sensitive to pain, it is a good plan to divide the prepuce first and give time for the absorption of the flaps, after which the rest of the operation can be performed. In general, however, I have found that the patient either insisted upon having all done at once or refused to submit to any operation.

Gonorrhœa and Gleet are not unfrequently met with among spermatorrhœa patients; these are generally persons who, having almost recovered from spermatorrhœa, have suffered a relapse in consequence of contracting infection.

[41] "Mr. Milton's plan is simple, and as good as any."—*On Gonorrhœa and Syphilis*, by Silas Durkee, M.D., p. 78.

In gonorrhœa, as in all other diseases, each case must, to a certain extent, be treated on its own merits. The use of specifics, such as copaiba, cubebs, &c., one of the most incurable of all forms of routine, is still more to be deprecated here; they are scarcely ever called for, they are often useless, and too often injurious.

The irritation of the bladder, the disordered state of the stomach, the lowered tone of the health, the foul and trembling tongue, induced by large doses of copaiba, are particularly calculated to make the spermatorrhœa worse, and I quite agree with Remak, that an exacerbation may ensue from the use of this filthy drug.[42]

In general, however, if there is no great disorder of the health, and no other complication present, gonorrhœa is soon subdued by aperients, acetate of potass, and mild injections, applied, not to the orifice, but over all the diseased surface.[43] In obstinate cases of gleet, blisters, tonics, mild aperients and injections are, I may now venture to state decidedly, the only means on which the surgeon can count for success, and very fortunately they ameliorate the spermatorrhœa.[44]

Stricture is not a very common complication of spermatorrhœa, unless the patient has suffered also from gonorrhœa. I have, however, several times seen it. It is generally much more manageable, and the constriction always appeared to me to be shorter, thinner, and weaker than the ordinary kinds. Indeed, unless the disease has been allowed to go on unchecked till it has attained a most unmanageable form, the stricture which results is seldom very difficult to treat. Two or three applications of the nitrate of silver, by means of the instrument previously described, generally produce such a relaxation or absorption of the stricture as to enable a No. 9 bougie to pass with ease. To dilatation some yield rapidly, some slowly, or not at all. It seems difficult to understand how an affection, induced by the spermatorrhœa should, when once produced, keep up the present disease—yet such appears to be the case, and I have sometimes found that the cause of resistance of an

[42] *Diagnostik u. pathogen. Untersuchungen in der Klinik des Herrn Geh. Raths, Dr. B. Schoenlein.*

[43] For further particulars I must refer to my work on *The Treatment of Gonorrhœa.*

[44] See a paper on the treatment of gleet and inveterate gonorrhœa, read before the Medical Society of London, October 28, 1854, and inserted in the medical journals.

obstinate case was a stricture, the existence of which had not been ascertained.

Varicocele.—In my opinion an unnecessary amount of importance has been attributed to this complication. Mr. McDougall says that in the severer cases nearly one-third of his spermatorrhœa patients were suffering from varicocele, and there is no doubt that a certain amount of it is by no means uncommon in these patients; but whether this proportion is greater than in persons free from spermatorrhœa is a point we have yet to learn. As I never saw the treatment or neglect of this symptom exert any appreciable influence over the course of the spermatorrhœa, I rarely, if ever, interfere with it, except at the express wish of the patient, when a varicocele ring may be worn.

Irritable Urethra; Coldness of the Scrotum.—A very useful means of diminishing any morbid sensibility of the urethra, especially in those cases complicated with slight stricture or gleet, is the use of a gum-elastic bougie, warmed till it is quite soft and introduced twice a week. In some instances a silver bougie answers better. Aperients, tonics and sedatives combined, should also be exhibited; among these figure infusion of rhubarb and calumbo with soda; Dover's powder and hydrarg. c. cretâ; nitric acid, laudanum, dec. uvæ ursi, or infusion of quassia, &c., according to the circumstances of the case.[45]

To my thinking the english bougies are by no means so well suited to these cases, especially when there is any stricture, as those made by Walters & Co., in imitation of the french instruments. In the first place the shape is bad. A bougie of the form shown in the

[45] For instance:—

℞ Sodæ bicarb. ʒj.
Syrupi ʒiij.
Spir. myristecæ ʒss.
Inf. rhei ʒiij.
— cuspariæ ad ʒviij. ℿ

Coch. amp. duo ter quotidie sumend.

℞ Hydrarg. c. cretâ gr. iv.

omni nocte sumend.

or, Pulv. ipecac. comp. gr. vj.

omni noct. sumend.

The Dover's powder may be made into a pill with either glycerine or aromatic confection; but it is not safe to treat the hydrargyrum c. cretâ in this way, as the mercury is easily reduced by rubbing.

annexed engraving, is much better adapted to the case, and passes with far greater ease. In the next place the material is, in my opinion, too hard and unyielding. That of which the french bougies are made is decidedly preferable; and I was glad to learn that these bougies are used at an institution where great attention is paid to urinary disorders—St. Peter's Hospital. A bougie of this kind, dipped in very hot water, then dried and well oiled, will pass along the urethra and scarcely give even the least uneasiness, when an ordinary instrument would occasion intolerable pain. Some surgeons seem to think pain is rather desirable in spermatorrhœa than otherwise. Mr. Adams advises[46] that a bougie should be passed, and that if it cause a little pain and bleeding, all the better, as that will divert the patient's mind from imaginary sufferings; but I should think pain an evil to be always avoided, if possible, and more likely to divert the patient from consenting to steps absolutely necessary to the cure.

Patients usually labour under the impression that in treating stricture it is absolutely necessary to distend it steadily, progressively, and it may be forcibly. This is a mistake, and especially in regard to traumatic and retractile stricture. At no time does any such amount of excessive force as may give pain prove serviceable; in the two latter forms it is the very reverse. Of course a patient who has just made some progress, say got up from number four to number eight, is exceedingly mortified at finding that he must go back all at once, not to four, but to three or even two; but this must count for nothing against the certainty of aggravating mischief by attempting dilatation when the canal will not bear it. At such times what is wanted is not the largest-sized bougie that can be got through the constriction, but a size that will pass into the bladder without setting up irritation.

Occasionally a patient describes an annoying pain at the epididymis, which sometimes shifts to the vicinity of the prostate, or he is tormented by a sensation like that of a worm creeping along the urethra or vas deferens. Again,

[46] *Medical Times*, 1857, vol. i. p. 453.

he feels as if a little fluid were passing from the urethra, and is only undeceived by looking. Sometimes the uneasiness is indefinable but not the less disagreeable. In fact, it is in some patients dreadful. Many a man who would not shrink from mere pain, who would scorn the idea of recoiling from danger, loses both his temper and spirits under the incessant, but petty ravages of this canker-worm. I am disposed to class along with this the perspiration and coldness of the testes and scrotum, which some complain of; they appear to be all purely nervous symptoms, dependent on disordered health. Strong veratria ointment, or some mild counter-irritant, as a blister, coupled with sedatives, attention to the bowels and stomach, will generally succeed in subduing these symptoms, which, however, now and then linger on for a long time.

Coldness of the penis and scrotum is an important symptom, and should not be lost sight of, as it often increases or diminishes with the growth or decline of the spermatorrhœa, so long as impotence has not ensued, when it becomes chronic and often pervades the whole frame. When, in a case of spermatorrhœa, this symptom persists, the surgeon must make up his mind to treat it in earnest, or very unsatisfactory results may follow. I am most anxious, in respect to this as to any other symptom, not to say a word which might create unnecessary alarm, but I consider that it would be a gross dereliction of duty, for an author who knew the importance of attending to such a warning, to disguise the truth with the view of flattering any opinions or prejudices whatever.

One of the first things to do is to give quinine, if it has not been given before, and this is one of the few affections of such a nature, in which it may be advantageously conjoined with iron. The citras ferri et quiniæ may be prescribed in doses of five grains three times a day, but there will rarely be much improvement till it has been continued some time, and till the patient can take quite double this amount, or even more. Strychnia and lupulin, given as a pill at night,[47] are generally very useful adjuncts. Along with these the patient may take a glass of rum and milk at night, gradually raising the quantity of the former from one to two

[47] ℞ Strychniæ gr. ss.
Lupulinæ (in grains) ʒij.
Spirit. rectific. m. xx.
Mucilag. acaciæ q. s. ft. pil. xl.
ij. omni nocte sumendæ.

wineglassfuls of rum. It is, however, essential that this should be pure and old, and that the milk should be good. As both these requisites are attainable, in London at any rate, there is no excuse for any negligence on this head. I have often seen very good effects from the use of a course of De Jongh's cod-liver oil, especially during cold weather. Whenever it is necessary to interrupt the use of the citrate, I would give the preference as a substitute to the dilute phosphoric acid, a medicine from the due use of which I have seen extraordinary benefit. In my opinion, however, the patient must take at least a drachm daily.

Indigestion.—The indigestion also which accompanies spermatorrhœa is generally of a very simple and manageable kind. Aromatic confection in combination with sulphite of soda and mint-water,[48] or an aromatic aperient pill, almost invariably suffices to remove it, and if occasionally ineffectual, are at least as efficacious as the most complicated prescriptions ingenuity has yet invented. Mr. McDougall mentions[49] a case in which the simplest food would not remain on the stomach, and the patient had "frequent eructations of fluid which blazed like oil if spit out into the fire," but I have not observed anything like such severity in the symptoms.

Treatment of Urinary Deposits.—When phosphates are present in the urine the accompanying symptoms must be very carefully looked to. Generally speaking, it may be said that, irrespective of this deposit following a strain or blow, the first great requisite is a free use of diffusible stimulants, such as ammonia and ether. Thus, for instance, the ammoniated tincture of valerian may be given in

[48] The following prescription, though not strictly scientific, has proved in my hands useful in so many hundreds of cases that I feel no hesitation in giving it:—

℞ Sodæ carbonatis ʒiss.
Acidi sulph. diluti ʒj. Misce et addc
Confect. aromat. ʒij.
Acidi hydrocyan. diluti, Pharm. Brit. m. xviij.
Mist. camphoræ ad ʒvj. ℿ

Coch. ampl. duo bis quotidie sumend.

When there is much flatulence peppermint-water may be substituted, or two or three peppermint lozenges may be taken after each dose; but carc must be taken to see that they are made with the real cuglish oil. This is gencrally known by their being broad, thin, and hard. Those made with thc french oil, which is only about a tenth of the price of thc other, are much inferior, and are thick and narrow.

[49] *A Practical Treatise on the Causes, &c., of Spermatorrhœa*, p. xi.

drachm doses, three times a day, or the aromatic spirit of ammonia in the same quantity, and either of these may be conjoined with half-drachm doses of the spirit of ether. Rum and milk at bedtime, especially if pains be taken to secure *old* Jamaica rum, answers very well with these patients. Bromide of ammonium too, in ten-grain doses, two or three times a day, is an excellent remedy, particularly if there be much sleeplessness or nervous excitement. Dr. Harley, when the patient perspires freely and the sweat is acid, recommends[50] nitro-muriatic acid with gentian after meals, and a dose of sulphuric acid, to diminish the perspiration, between them. Very small doses of strychnia, accompanied by a sedative, such as hyoscyamus, may generally be given with advantage. I know of no method superior to that of prescribing them in a pill at bedtime, though some practitioners prefer exhibiting the strychnia in combination with dilute nitric acid.[51] Those cases in which a deposit of the phosphates follows an injury of the spine are more rarely seen in connexion with spermatorrhœa, and fall rather within the domain of general surgery. In these cases one of the most valuable remedies is, especially if there be pain, a large opium plaster over the seat of the injury. When this cannot conveniently be resorted to, sponge-baths and friction over the loins with a horse-hair belt may be employed. The general treatment is much the same as in the preceding class of cases. Citrate of ammonia and quinine seems to answer very well, but according to my experience the dose given must often be much larger than that usually ordered. Dr. Prout used to give morphia with very great benefit in these cases, but to be of any value it will be requisite to order quite half a grain to a grain daily. The acetate, in conjunction with the solution of acetate of ammonia, offers a very useful formula.[52] When chronic

[50] *Medical Times and Gazette*, 1864, vol. ii. p. 484.

[51] ℞ Strychniæ gr. j.
Extracti hyoscyam. ʒij.
——— anthemidis ʒss. ♏ ft. pil. xx.
i. omni noct. sumend.

℞ Strychniæ gr. ss.
Acid. nitric. dil. ʒiij.
Syrupi aurant. ʒvj.
Tinct. chiratæ ad ʒiv. ♏
Coch. min. i. ter quotidie ex aquæ cyatho vinario sumendum.

[52] ℞ Liq. ammon. acetatis ʒiss.
Spir. ether. nitr. ʒiij.

cystitis is present, or when a portion of the urine is retained owing to enlargement of the prostate, the urine may be drawn off by the catheter, and the bladder washed out occasionally with warm water. Oxalates in the urine require warm clothing, abstinence from all heavy food, ill-cooked vegetables, sweets, wine and beer; cold, unsweetened brandy and water or whisky and water being substituted. Nitric and nitro-hydrochloric acid with tincture of orange-peel, cinnamon or calumbo, accompanied by mild mercurials and laxatives,[53] is useful when great nervous irritation exists. Dr. Golding Bird used to give sulphate of zinc in large doses, often prescribing along with it a small amount of hyoscyamus and camphor. It is, however, to my experience, very questionable whether it equals the tincture of the sesquichloride of iron. Colchicum is often of great service.

Excess of uric acid requires great attention to the functions of the skin. The clothing should be warm, and free transpiration or even diaphoresis promoted by vapour-baths and friction of the surface; gentle aperients and alteratives[54] and small doses of alkalies.[55] When gastrodynia is present dilute hydrocyanic acid or bismuth may be given just after meals.[56] The late Dr. Golding Bird used to

Morphiæ acetatis gr. j.
Mist. camph. ad ʒvj. ♏
Coch. amp. duo ter quotidie sumenda.

[53] ℞ Acidi nitric. dil.
Tinct. cinnam. c. aa ʒss.
—— cinchonæ ʒij. ♏
Sumat coch. min. i. ter quotidie ex aquæ cyatho.

[54] ℞ Pil. hydrargyri gr. vj.
Pulv. rhei ʒss.
Glycerinæ minima viij. ♏ ft. pil. xij.
ij. omni nocte sumendæ.

℞ Pil. hydrarg. gr. vj.
Ext. hyoscyam. gr. xx. ♏ ft. pil. vj.
i. omni nocte sumend.

[55] ℞ Potassæ bicarb. ʒiv.
Tinct. cinnam. c. ʒvj.
Infus. calumb. ad ʒvj. ♏
Coch. ampl. i. bis quotidie sumend.

[56] I think the formula given at p. 104 will be found suitable for these cases. Bismuth may be tried in the following formula :—

℞ Liquoris bismuthi et ammoniæ citratis ʒss.
Mist. camph. ʒiijss. ♏
Coch. amp. i. pro re natâ sumend.

prescribe in these cases oxide or nitrate of silver; but staining of the skin has so often resulted from the use of both, that I think neither ought ever to be employed unless the symptoms are of the most serious nature, and that we rarely, if ever, find in spermatorrhœa. The amount of animal food ought to be reduced as low as is compatible with the preservation of strength, and in very urgent cases had better be suspended altogether. The tincture of the sesquichloride is also very useful here, and colchicum is often beneficial.[57] Vichy water, tartrate of potass and phosphate of soda are also of value.[58] The presence of cystine generally indicates a necessity for giving acids which will promote the elimination of bile, as the nitric and nitro-muriatic, or the use of iron, as the tincture of the sesquichloride or tartrate. The state of the health should be carefully attended to, the bowels acted on by gentle aperients and alteratives, and all malt liquors, rum, *et similia*, be avoided.

As I have never seen blood or albumen in the urine to such an extent as to call for special treatment, I refrain from touching upon points in therapeutics which might lead me too far from the subject in hand. Pus I have occasionally seen in very alarming quantities, but there was nothing in the history of any of the cases, or in the results of treatment, to justify the belief that it required any measures except those calculated to ward off exhaustion. When this symptom yields at all, I believe it always yields to the treatment laid down for spermatorrhœa, and possibly the tincture of the sesquichloride of iron is as potent a remedy against it, especially when conjoined with mild counter-irritation over the seat of the disorder, as any that could be suggested. An excess of mucus generally calls for the use of alkalies, such as the bicarbonate of potass in some astringent decoction or infusion, as that of pareira, uva ursi,

[57] ℞ Extr. colch. acet.
Pil. hydrarg. aa gr. vj.
Extracti hyoscyam. gr. xij. M ft. pil. vj.
Sumat i. omni nocte.

[58] ℞ Potassæ tart. ʒij.
Syrupi aurant. ʒiv.
Spir. myristicæ ʒij.
Infus. cuspariæ ad ℥vj. M
Sumat coch. amp. duo bis quotidie.

Phosphate of soda may be substituted in the same doses, as only small quantities are required when a diuretic effect is aimed at.

or buchu, but for these substances to exert any real influence over cystorrhœa they must be taken in much larger doses than are generally prescribed. The amount of bicarbonate of potass need not exceed fifteen to twenty grains, but to order ʒss. or ʒj. of decoction of uva ursi or infusion of buchu, seems to me waste of time. We might as well tell the patient that he would find two or three tablespoonfuls of warm tea a refreshing meal. Either the patient should be directed to make the decoction and infusion (for I think they act best in conjunction) himself, and take quite half a pint daily, at least half as strong again as the pharmacopœia preparation, or to add to each dose a scruple of the hard extract of pareira of the London Pharmacopœia. Liquor potassæ acts very well in some of these cases; half a drachm may be given two or three times a day in quite half a tumbler of good milk, which disguises its nauseous soapy taste infinitely better than anything I know. Benzoic acid is said to be occasionally very useful in intractable cases.[59]

Gout, Rheumatism and Neuralgia.—If a patient suffering from spermatorrhœa or a tendency to impotence be attacked with gout, rheumatism, or neuralgia, I believe he inevitably suffers a relapse. It may not be severe, or it may be very troublesome, but my experience is, that he always gets somewhat worse. It is possibly this tendency which has made some writers think that gout augments the desire for connexion, but I am inclined to believe its action is the very reverse, and that the same holds good with respect to every disorder attended with pain.

I would, therefore, always suggest removing the pain as quickly as possible. In gout I believe no remedy has stood its ground like colchicum, especially when given in the form recommended by Sir Everard Home, viz., large doses, such as a drachm, of the wine which has been kept for some time in a bottle, so that the mucilage, on the presence of which its purgative qualities seem to depend, has been effectually precipitated. Should the case be very severe and resist colchicum, a still more potent remedy, such as Laville's drops, may be called for. I believe this medicine is simply the old vinum veratri so much vaunted about sixty years ago. In rheumatism

[59] ℞ Acidi benzoici ʒj.
Glycerinæ m. xij. Misce et ft. pil. xij.
Sumat ij. bis quotidie.

I have seen nothing so quickly bring relief as half-drachm doses of the hydrochlorate of ammonia, used in conjunction with dry-cupping and strong sedative applications, such as solution of opium, of the strength of Ward's drop.[60] Neuralgia may be met with scruple doses of powder of valerian and a grain of sulphate of quinine in each, but the remedy, though potent, is disagreeable. Sir Charles Bell's prescription [61] is also excellent, but I am inclined to put rum and milk in pretty large doses before either. When the pain is relieved, the further treatment of such complications is generally a tolerably easy matter, and I need not dwell on it any more in detail.

Treatment of Impotence.—As yet, however active the search, men have failed to discover anything like a specific for impotence, and the greatest scepticism prevails as to the virtues of the once highly-prized aphrodisiacs. That some of them irritate the urinary organs, and thus occasion erections, is beyond doubt; but it is also equally certain, from the self-same observations, that they possess no power of restoring a lost function or repairing organic change. When Dr. Mason Good pronounced such a sweeping condemnation of them, and gave it as his opinion that they might, one and all, "as readily be relinquished for such purposes as the nests of the Java swallow, which are purchased at a high price as a powerful incentive, and form an extensive article of commerce in the East," he may be said to have pronounced judgment on them and presided at their interment; for there is no doubt that he gave utterance to the general opinion of the profession, which, since the days of Cullen and Hunter, has been year by year growing more incredulous on many of these points.

The plan of treatment I would venture to suggest would be the following. In the first place, quinine should have a fair trial. I question if there be any remedy which acts so beneficially here. Of

[60] ℞ Guttæ nigræ,
Chloroform aa ʒj.
Lin. camph. c. ʒij.
— saponis ʒiv. ℳ et fiat embroc.

A little to be well rubbed into the painful part with a piece of flannel at least once daily.

[61] ℞ Ol. tiglii (croton) gt. i. Mass. pil. colocynth. c. ʒj. Misce et fiant pil. xij. Mitt. pil. galban. comp. gr. xij. One of the purgative pills and two of the gum pills to be taken on going to bed.—*Institutes of Surgery*, vol. ii. p. 119.

course it will not undo all the effects of years of self-indulgence and neglect, still it will effect a great deal, and I possess notes of numerous cases where the capacity for connexion has been so far restored, after being in abeyance for tolerably long periods, as for instance sixteen or eighteen months, that the patients have, in reliance on my opinion, married, and where the fact of their having had children has quite justified the opinion. Along with quinine strychnia may be given, but upon quite a different principle. The former, when it does good, generally acts quickly, and the dose requires to be raised every six or eight days. Strychnia, on the contrary, seems to have a cumulative action, and must be given for a great length of time, but in very small doses, such as the twenty-fourth or twentieth of a grain.[62] Whether, therefore, the quinine be continued or not, I should advise that the use of the strychnia be kept up for several months. There can be no objection to combining either with capsicum; a remedy which has been praised by some writers, but from which I have seen little if any positive benefit. I have, however, never given it except in combination with other drugs, so that I am scarcely qualified to speak very positively.

When the patient is anæmic or suffers from the coldness spoken of above, iron may be given along with the quinine, and cantharides in very moderate doses can be added,[63] but the latter remedy must be used very guardedly, and given up directly any symptoms of

[62] I know of no better strychnia pill than that prescribed at page 105. For a mixture, especially when there is any loss of appetite and strength, I prefer the following to any I have tried :—

℞ Quiniæ sulph. gr. xij.
Magnes. sulph. ʒiv.
Acidi sulph. aromat. ʒij.
Tinct. cardam. compos. ʒvj.
Aquæ cinnam. ad ʒvj. ℿ

Coch. amp. i. bis quotidie sumend.

[63] The following prescription may be tried :—

℞ Ferri et quiniæ citratis ʒj.
Tinct. cantharid. ʒj.
Aquæ ad ʒvj.
℞ Spir. ammoniæ aromat. ʒiv.
— myristicæ ʒj. ℿ

A tablespoonful of the quinine and iron mixture to be mixed with a teaspoonful of the aromatic mixture, and taken three times a day in a wineglassful of water.

strangury show themselves even remotely. Employed cautiously, however, as for instance in five or ten-minim doses of the tincture for eight or ten days at a time, I see no valid objection to its employment, and never hesitate to prescribe it.

But however well quinine may be adapted to the first emergencies of the case, there generally comes a time when its action on the system begins to flag so evidently as to attract the notice of the patient. It is of no use to raise the dose of the medicine any longer, the constitution has become accustomed to the use of the remedy, and the only thing is to give it up for a time, after which it may be resumed with almost certain anticipation of benefit. During the interval I would strongly recommend the use of phosphorus. From the thirtieth to the twentieth of a grain may be combined with melted suet in the form of a pill, and the dose gradually raised to as great a height as the patient can bear. One patient told me that he constantly took a grain at a dose; he used simply to put it into a basin of gruel. Cod-liver oil may be given along with it in cold weather; the only oil, however, I should be disposed to place any reliance on, is De Jongh's. In hot weather the hyposulphite of soda, in half-drachm doses, may be tried as a substitute, but my experience of it has not inspired me with any high opinion of its merits, whereas from the oil I have seen very decided benefit. Rum and milk should be taken at bedtime, and the patient should have some red wine every day, avoiding beer as he would poison. Here, as in spermatorrhœa, I have often seen port, tarragona and claret of service, while I never saw any form of malt liquor beneficial.

The only remaining drug from which I have reaped any good is the ergot of rye, which should be given in as large doses as the patient can bear. The surgeon need not fear any bad consequences from employing it freely, as any irritation it may occasion is slight and fugitive. It may be given in conjunction with strychnia and phosphorus, but I do not think it harmonizes well with either quinine or steel.[64]

[64] I have been informed by an anonymous correspondent that suspensory bandages prepared in the following way are very useful:—"Steep the linen or cotton tissue in a mixture of five measures of strong sulphuric acid and three of pure nitric acid for an hour. Squeeze out the acid, wash with water till no sensible acidity remains, plunge it in a weak solution, then in water, and dry. This supplies more resinous electricity than any known agent." I have often

Dr. Druitt enumerates[65] among the remedies likely to be beneficial in impotence from severe illness, musk and indian hemp, spices, eggs, and oysters; and when it arises from lesion of the nervous centres a cautious course of corrosive sublimate. In imaginary impotence, sexual hypochondriasis he calls it, he has found[66] great benefit from the use of enemata at bedtime, cold or tepid salt hip-baths and opiate suppositories.

One of the greatest difficulties in the treatment of impotence is to overcome the apathy of many persons thus affected, especially if they are at all advanced in years. They seem to grow quite indifferent to the prospect, as if they would rather know the worst than find out a ray of hope; hypochondria masters them so completely, that I have frequently heard men of thirty-five talk about their being too old for cure, and rather liking such a conviction.[67]

The action of medicines requires to be aided here, as in spermatorrhœa, by diet, cold bathing, and chastity. Abortive attempts at connexion are worse than useless. Unfortunately, the idea has gained ground that marriage is, after all, the remedy for every form of spermatorrhœa and impotence, and numbers of patients not only take this false step before being cured, but persist in trying to have connexion, long after they have begun to notice that every essay of the kind, whether successful or not, is followed by an aggravation of the symptoms.

In young men the evil is not so serious, and soon repaired with a little attention; but it is melancholy to see the effects of this false impression upon the minds of old men who, after having been long impotent, fancy that the surgeon can resuscitate the power forfeited by years of over-indulgence, and blindly pursuing this delusion through every disappointment, turn aside from the reasoning of those who seek to convince them of their error. So long as they notice an erection in the morning, with which some persons are troubled a great part of their lives, and which in no way indicates either capacity or desire for connexion, they flatter themselves that their virile power

seen great benefit ensue from the use of this suspensory bandage, but never could make out whether it was owing to the electricity set free or the support given.

[65] *The Surgeon's Vade-Mecum*, tenth edition, p. 627.

[66] *Op. cit.*, p. 629.

[67] "Ye more of aige, ye nerrer hevenys blisse."

is only in abeyance. But this form of erection no more resembles natural erection than does that caused by injuries of the spine, with which it has probably some remote affinity.[68]

Vesicular Gleet.—This disorder is generally very manageable with simple aperients and tonics, with cold bathing, followed by a blister. A little sulphate of magnesia or soda, taken before breakfast and dinner, or lunch, in combination with quinine, and an aperient pill occasionally at night, will produce one or two loose motions daily, and by this means induce a marked diminution of the discharge, and, when aided by blisters, will, I believe, never fail.

In a disease accompanied by so many forms of functional disorder as spermatorrhœa, we can scarcely exemplify the value of treatment without carefully-written cases. Many patients present nearly the same mode of recurrence of the seminal emissions, but differ most strikingly in the extent and manner in which other functions are disturbed. In one man anæmia, lassitude, and torpor prevail; in another the most robust health and inflammatory disposition; in one apathy, in another intense irritability; obstinate dyspepsia, pains in the back, and turbid urine, attack some; others are strangers to any symptoms of the kind. Hence histories of cases become necessary to give vitality and form to the isolated details of treatment.

Cases, too, have this intrinsic value, that they are the most enduring and useful form in which experience can be handed down from one age to another, and thus they come to be read and prized when men have ceased to set the slightest value upon the opinions of those who gave them to the world. Accumulating thus, in the course of years, they enable men to bridge over the vast wastes of time, and compare their practice with that of their predecessors. By such industry alone can we improve upon the practice of those who have gone before us. Our art was called into being by such industry as this, by the "ancient and serious diligence of Hippocrates," the morning star of medicine; and it was the like kind of industry that withdrew it from the rubbish of barbarous and monkish superstition.

I would, therefore, most strongly urge upon my readers to record as many histories of the kind as they can, so that from time to time either our contemporaries or followers may be able to gauge the progress which treatment is making. I have no space left for any

[68] *Repert. für Anat.*, iv. Phys., B. 1. S. 275.

here, but in the fourth edition of this work the reader will find tolerably full histories of twenty-four cases of various forms of these disorders, together with thirty-eight cases in a more abridged form. The less, however, patients read about such subjects the better for them.

And now, as a parting word, I would urge the surgeon to impress upon the patient to remember, that youth is peculiarly the season for cure, and that in this, perhaps more than in any other case, hours fly quickly,[69] and once flown can never be recalled, and to banish from his mind the idea, that because he has an emission occasionally, he is suffering from spermatorrhœa. Those who tell him so deceive him or are deceived; and I cannot conclude better than by quoting a part of Mr. Curling's letter: "I assume," he says, "the cure of spermatorrhœa to mean, not the arrest altogether of involuntary emissions, but the prevention of their frequency to such a degree as to weaken the powers and impair the health."

[69] "So passeth in the passing of a daie
Of mortall life the leafe, the bud, the flowre."

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